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UNITED STATES
DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
H. H. Bennett, Chief

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DETAILED INFORMATION ON

SURVEY OF BUFFALO GRASS IN WESTERN KANSAS,

OKLAHOMA, NEBRASKA, TEXAS, AND EASTERN COLORADO

Supplement to Bureau of Plant Industry

Circular on Same Subject

by

D. A. Savage

4

562 5 5 wgsi 3 - 3 -

SCS-TT-1 5-30-36 percentage of ground surface occupied by grasses and forbs on ungrazed, moderately grazed and heavily grazed areas on different types of soil in the vicinity of Dalhart, Texas, as charted with pantographs in June, 1935.

	No.																		-				
Grazing	of						Peren	i ol		Gr	ASS 83	ecies										Tetal	
and	quad-			Short	OT 8 5 9 6	n q	Porteill	II at	grass		7.7				m-4-7			mual				forbs	
clipping	rats	Bg	Bh	Bd	Sp	Тр	Total	Asa	Λ		ll gr		0	maha?	Total	-		rasse		Mada 7		Per &	
treatments							ay Loam			Al	BC	sn s	Span	Total	Pere	CV	PO	H	PC	Total	Prass	Blen	tion*
annument						01.	- Livean	DOIL	100	штте	8 645	C OI D	Lhart	_									
Moderately grazed	10	3.87	0	6,83	•01	0	10.71	0	0	0	0	0 3		16	10.00		06	04	^	30	30.00	0.0	22 04
North of Etter			_		•01	·	10011	O	O	O	U	0 .1	3 0	•16	10.87	. 0	•00	•04	U	•10	10.97	•77	11.74
Heavily grazed North of Etter	10	2.77	0	2.30	•01	0	5.08	0	0	0	0	0 0		03	5,09	_	0	0	0	0	F 00	10	5.19
North of Even	10	T	0	T	0	Ö	T	0	0	0	0	0 •0		•01	7 T	0			0	0	5•09 T	.10 T	Ω•TA
Ave. heavily	2.0	_		_		•	-	J	0	O	U	U) 0	U		U	U	U	U	U	T	T	Т
grazed	20	1.39	0	1.15	•01	0	2.54	0	0	0	0	0 •0	0	•01	2,55	0	0	0	0	0	2,55	₀ 05	2.60
grazou		_•			••-		Dec.	•		0	O	0 40		•01	2600	v	•	U	•	J	2800	•00	2,000
Average all grazed areas	30	2.63	0	3,99	•01	0	6,63	0	0	0	0	0 .0	9 0	•09	6.71	0	•03	•02	0	•05	6.76	41	7.17
grazed arous							y Leam	-	/20 :	And the sales of the sales of	7717.00				0817		800	802		•00	0810	9 T.L	1921
at a second for						010	1 magni s	-01L	110	4 10	TITTO	No.	OT IN	mar. of	-								
Not grazed for	10	11.82	0	10.03	•22	.11	22.18	0	0	0	0	0	0	0	22.18	0	•08	0	0	.08	22.26	.37	22.63
6 years Moderately grazed					A 40.40		220	•			0	9	, ,	J	ere erro	J	900	U	0	900	ಒಎಕ್ಕಿಂ	607	2200
Richfield soil	10	•58	0	•53	0	0	1.11	0	0	0	0	0 •0	4 0	•04	1.15	0	(T)	0	0	T	1.15	•35	1.50
Pullman seil	10	4.96	0		•01	0	13.05	0	0	0	0	0 •0		•01		0		_	0	•04	13.10		13.16
Ave. Med.	10			0.00	•01	•	70000	•	0	· ·	· ·	0 40		\$0I	70,000	•	002	_	Ü	907	20020	•00	10010
grazed	20	2.77	0	4.31	•01	0	7.08	0	0	0	0	0 •0	3 0	•03	7,11	0	₆ 02	Т	0	.02	7.13	.21	7.33
Average all	20	2011	•	1807	901	Ŭ	7 800	· ·	0	v	V	0 0	0	800	/ Walash	·	802	_		902	1 0,20	-	1 800
areas	30	7.29	0	7.17	•12	e 06	14.63	0	0	0	0	0 .0	2 0	•02	14.64	0	* 05	ψ	0	* 05	14.70	▲29	14-98
67.000		1000		1 02.1			oam Soi						Stati		11801	<u>_</u>	400				11110		
Net grazed					<u> </u>	idy D	vam ber	_ (7101	721 04	10.1	MARKET C	Doctor										
Lightly clipped	10	6.67	0	•35	0	0	7,02	0	0	004	0	0 .3	8 0	•42	7.44	0	0	0	0	0	7.44	•32	7.76
Closely clipped		9.69	•01	7.20	•32	0	17.22	0	0	.04	•03	_	0 0	.07		ō	0	-	0	0	17.29	-	17,30
Average	9	8408	POT	1 420	502	v	Tiens	v	0	90.7	400	0	•	401	1.020	Ĭ						• • •	
net grazed	15	8,18	•01	3.78	•16	0	12.12	0	0	•04	.02	0 .1	9 0	•25	12,37	0	0	0	0	0	12.37	.17	12,53
Moderately grazed	10	0910	*01	0.0	910	·	TNATH	•		901	902	0 41		9.00									
Rouse's pasture	10	10.12	0	2,22	•11	0	12.45	0	0	.12	0	0 42	0 0	.32	12.77	0	b	0	0	0	12.77	•06	12.83
Heavily grazed	10	TOTE		ಬಕ್ಕಿ ಬಬ	9.4.4.	v	THETO	•		4.14		- 4	•	0012			_						
Dalhart Station	10	4.14	0	3.32	•04	T	7.50	0	0	T	•01	0 •4	в о	•49	7.99	0	. 01	0	0	•01	8,00	.19	8,19
Average all	10	3 9 T.Z	O	0402	\$0±	,	7 600	•		_	401												
grazed areas	20	7.13	0	2,77	•08	(T)	9,98	0	0	•06	01	0 .3	4 0	.41	10,38	0	•01	0	0	•01	10.38	.13	10.51
Average	20	1910	Ü	ED / (•00	1	3 430			400	001			,									
all areas	35	7.48	மு	3.10	.10	ψ	10.69	0	0	•05	100	0 .2	9 0	•35	11.04	0	T	0	0	T	11.05	.14	11.18
		1 920		0 410			20,00			bns													
Sage-sand type									of the last	No. of Concession, Name of Street, or other Persons, Name of Street, Name of S													
Mod. grazed	20	5.29	.77	0	•01	0	6.07	0	•09	•04	1.43	001 1	7 401	1.75	7.82	0	•09	0	T	•08	7.91	1.32	9 . 23
Yucca-sand type	20		• • •	•	407																		
Heavily grazed	10	T	.17	0	.01	1.83	2.01	•08	0	5440	₃ 35	0 .1	2 0	5,95	7.96	LO	0	0	0	•01	7.97	•88	8.85
Average both		-	**.	3	442																		
sand types	30	2.65	47	0	•01	.92	4.04	•04	•05	2672	.89	·01 .1	5 .01	3,85	7.89	001	₩05	0	T	•05	7.94	1.10	9.04
3, 500		2500	421							il Ty													
Grand average																							
Not grazed	25	10.00	201	6.91	.19	.06	17.15	0	0	•02	¿01	0 .1	0 0	-			•04		0		17.32		17.58
Mod. grazed	60	5.51		3.34		0	9.08	0	.02		•36	T .1	4 T	-		0		.01		ە05	9.70		10.28
Heavily grazed	40			1.49	02	.61	4.02	.03		1680	.12	0 .2	0 0			T	_	_	0	•01	6.17		6,55
MANAGE A KIGNELL		7907						_				T .1	7 1	1.24	8,15	т	_03	•01	T	•03	8.19	•50	8,68
All grazed area		3.94	.13	2.55	.03	•26	6,91	# OT	POT	679	ø26	T 0 T		1.00			.03		T	•03			10.66

Bg-Bouteloua gracilis (Blue grama), Bh-Bouteloua hirsuta (Hairy grama), Bd-Buchloe dactyleides (Buffale grass), Sp-Schedomardus paniculatus (Tumble grass), Tp-Triodia pilosa (Hairy Triodia), Asa-Andropogon saccharoides (Torrey's Beard grass), As-Andropogon scoparius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Bouteloua curtipendula (Side oats grama), Sn-Sorghastrum nutans (Indian grass), Sc-Sperebelus cryptandrus (Sand drepseed), Spsp-Sperebelus species, Cv-Chloris verticillata (Windmill grass), Fo-Festuca octoflora (Slender fescue), H-Hordeum pusillum (Little barley), Pc-Panicum capillare (Witch grass),



Grazing	No.									1-7			rass	spec	cies												Total	To-	Total	Char-	No.	of
and	of							Pe	rem	181 6	grasse		7		9					<u> </u>			nual			Total	ferbs	tal	Vege-	ted**	see dl	lings
special	quad			rt gras	ses	m - A - 4	A ====	1.0	100	A.	Al.		l gr			Ç.	C _A	TTm		Total	- Cie		2880			all	Per &	sed-	te-	Ann.	70.070 77	anten
treatment	rats	Bg	Bh	Bd	Sp	Tetal	Asm	AI	AB .	AB	EL.	Be	rap	HI	Sn	Da	20	Up	TOTAL	Pere.	CA	FO	H	Pc T	otal	grass	Bien.	ges	tion*	forbs	Bg	Bd
1									Si	lty C	lay I	oim S	oil	near	Kalv	esta	, Kan	888														
Net grazed for																																
8 years	4	7.76	.11	•60	0	8.47	•27	•37	0	0	2.05	2.90	0	•03	0	0	0	0	5.62	14.09	0	0	•02	0	.02	14.11	1.76	0	15.87	•32	0	0
Mederately grazed																			_													
Winter's pasture		3.55		16.39		19.94		0	0	0	•06	0	0	0	0		1.15						•06	0	•06	21.21	•16	0	21.37	\mathbf{T}	0	0
Byler's pasture	4	11.71	0	2.89	0	14,60	0	0	0	•05	₀ 50	1.16	0	0	0	0	0	0	1,71	16,31	0	0	0	0	0	16.31	•61	0	16.92	.02	0	0
Av. moderately																																
grazed	12	7.63	0	9464	0	17.27	0	0	0	.03	•28	•58	0	0	0	0	•58	0	1.46	18.73	0	\mathbf{T}	•03	0	•03	18,76	•39	0	19.15	•01	0	0
Heavily grazed	4	4.18	0	10.37	0	14.55	0	0	0	0	0	0	0	0	0	0	0	0	0	14.55	0	0	0	0	0	14.55	0	0	14.55	.14	0	0
Very heavily grazed	4	1.90	0	2.71	0	4.61	0	0	0	0	T	0	0	0	0	0	.02	0	•02	4.63	0 ,	02	•03	:02	.07	4.70	-18	0	4.88	.60	14	144
		4.57		7.57	0	12.14	0	0	0	-01	-09	•19	0	0	0	0	.20	0		12.64			.02									
Av. all grazed areas						_				-	_															12.67			12.86		5	48
Av. all areas	24	5,37	.03	5,83	0	12.23	•07		0	.01	•58	.87		•01	0	0	•15		1.78	13,00	0	01	.02	•01	•03	13.03	•58	0	13,61	•27	4	36
								"Da	lhar	t" Si	lt Lo	am Se	il (Gard	an Ci	ty S	tatio	n)														
Not grazed for				0.5	_						0	•			^	_												_				
14 years	10	•69	0	•05	T	•74	0	0	0	O	0	O	O	0	O	O	0	O	0	•74	0	0	0	Q	0	•74	•13	0	♦87	0	6	20
Moderately grazed																																
Not watered	3.0	OFF		O.F.	_	3 70	•	_	0	0	0	0.0	0	_	0	^	•		00	3 734			0.5		0.77	7 07	0.0				_	
First location	10	-87	0	•85 •40	0	1.72 1.14	0	0	0	0	0	0	0	0	0	0	0	0	0	1.74	0	0	•23	0	•23	1.97		0	2,05	0		59
Second location Av. not watered	8 18	.74 .81	0	• 1 0	0	1.43	0	0	0	0	0	•01	0	0	0	0	0	0	_		0	_	0.12	0		1.14 1.56		0	1.16	0	14	
Watered	70	\$OT	0	800	O	TOTO	0	U	0	U		201		0		•			₽O.T.	TPEE	•	•	• T %	O	012	T490	•00	O	1.61	0	12	70
eccasionally	4	3.74	0	.13	0	3.87	0	0	0	٥	0	0	0	0	0	0	n	0	0	3 87	0.	02 3	. 27	0	73.20	7.76	2.03	A	9.79	•05	77	14
Av. Mod. grazed		2.28	0	•38	0	2.65	0	0	0	0	٥	.01	0	0	0	0	0	٥	.01			01 2				4,66		0	5.70	.03	10	
Average all areas		1.49	0	•22	T	1.70	0	o	0	0	0	.01	0	0	0	0	0	0		1.70						2.70		0	3, 29	-	8	
1		2020		455					Ente	m mi e	e" Sa					rkan	999 P	iwar							.,	100.0	•••			002		- L
let grazed for									.m. 90.	PATTE	, De	MM IN	- Ju ui	01	ene V	T. C. A.	T. T.	T. D.I.	_													
many years	4	.02	•92	•03	0	•97	0	0	.06	•48	T	0	0	.21	.89	.37	•48	0	2.49	3.46	0 .	73	0	0	•73	4.19	1.26	0	5.45	.12	0	0
Mederately grazed																																
Brown's pasture	8	4.03	0	₀ 05	.02	4.10	0	0	0	T	.08	0	0	0	0	0 :	1.90	0	1.98	6,08	0 .	48	0	0		_		0	7.48	•29	0	0
Moody's pasture	8	•05	•90	T	0	•95		•15		•34	T	0			•44					2.87	0.		0 ,		_	3,20		0	4.15	•06	0	0
Jenes' summer pasture	8	1.97	1.15	0	0	3.12	0	.2l	0	•39	0	•39	.18	.02	.21	.02				4.96				.10		5.19			9,16		0	
Jones' winter pasture	8	•10	3,06	0	0	3,16	0	•10	0 :	1.76	0	-			2.45	-				8.28			0 ,						10.54		0	0
Av. Med. grazed	32	1.54	1.28	601	.01	2,83		.12	.01	•62	.02	•17								5.55			0 4			5,688		•01		.25	0	0
Heavily grazed	8		2.08	T		2.14	0	0	\mathbf{T}	•18	0	0			•10					3,27			03			3,43		0		.14	0	0
ev. all grazed areas	40		1.68	.01		2.49		•06			.01									4.41			02		-	4,66		•01	6.91		0	0
Av. all areas	44	•54	1,43	•01	T	1.98	0	•04	.02	•43	•01	•06	.02	•10	▶ 59	•25	.61	T	2,11	4.09	To	36	01	03	641	4,50	T*85	T	6.42	917	0	U
Grand average												All	Seil	Тур	88																	
Net grazed	10	2.82	34	•23	m	3.39	.00	.10	.00	.16	•68	•97	0	-08	.30	.12	.16	0	2,70	6,10	0	24	LO	0	.25	6.35	1,05	0	7.40	.15	2	7
Mederately grazed				3.34	T T	7.58		.04	T	-22	,10				.26					8,98			68			9.77			10.89	.10	3	
Heavily grazed				5.19	0	8,35		0	Ť	.09	910		0		•05			ō		8.91				0		8.99			10.27		0	0
Very heavily grazed		1.90	7.04		0	4.61		0	0	0	T	0		0		0		Ó		4,63				.02		4.70		0	4,88		14 14	
All grazed areas		2.93	_	3 .85	T	7.34			T		•05				•15			T		8.23					.43	8,66	1.02	T		.20	4 8	
				2.64				٠05	.01	.15	26									7.52					•37	7.89	1.03	T	8,92	.18	3 2	23
	200	~500	920	207		3,00	-	300		120	320	9.22		-										2	- 41	O	none	ant.				

^{*} Total vegetation includes all species, except annual forbs. ** Only the more important annuals were charted. T-denotes a trace or less than oll percent.

Bg-Bouteloua gracilis (Blue grama), Bh-Bouteloua hirsuta (Hairy grama), Bd-Buchloe dactyloides (Buffale grass), Sp-Schedonnardus paniculatus (Tumble grass), Asm-Agropyren smithii

(Western wheat grass), Af-Andropogen furcatus (Big Bluestem), Asa-Andropogen sacchareides (Torrey's beard grass), As-Andropogen sceparius (Little Bluestem), Al-Aristida lengisets

(Wire grass), Bc-Bouteloua curtipondula (Side oats grama), Psp-Panicum species, Rf-Redfieldia flexuosa (Blow-out grass), Sn-Sorghastrum nutans (Indian grass), Sc-Sperebelus asper

(Rough rush grass), Sc-Sperebelus cryptandrus (Sand drepseed), Up-unknown perennial, Cv-Chloris verticillata (Windmill grass), Fe-Festuca octoflora (Slender fescue), H-Hordeum

pusillum (Little barley), Pc-Panicum capillare (Witch grass).



Percentage of ground surface occupied by grasses and perennial and biemial forbs on ungrazed, mederately grazed and heavily grazed areas in the vicinity of Tribune, Kansas, as charted with pantegraphs in June, 1935.

Tribune, Kansas, 1935

																				-	-
	Grazing	Neo							specie	8			Total	_	Tetal		nual		0. 0		
М	and	ef			Peren							Total			Tege-		rbs		edli	ngs	
	watering	quad-	Sh	ort gra	202		Tall			Total		The second secon	Per &				Esti-	pe:	r me	ter	
	treatments	rats	Bg	Bd	Total	Al	Sa	Sc	Tetal	Peres	H	grass	Bien.	208	tien*	ted	mated	Bg	Bd	Tp	
					*Ce	lby"	Silt-	Leam	Seil	(Medium-	heavy	textur	0)								
No	t grazed																				
	Lightly watered lawn	4	4.66	88.44	93.10	0	0	0	0	93.10	•03	93.13	•19	0	93.32	0	0	0	0	0	
	Dry-land area**	8	14.44	2.10	16.54	0	O	0	0	16.54	0	16.54	•24	0	16,78	0	M	0	0	0	
	Average not																				
	grazed	12	9.55	45,27	54.82	0	0	0	0	54.82	•02	54.84	•22	0	55.05	0	F	0	0	0	
Mo	derately grazed																				_
ALL O	Cattle-herse pasture																				
	High land	8	1.35	1,19	2,54	0	0	0	0	2.54	0	2.54	•05	0	2.59	${f T}$	F	5	55	F	
	Low land	8	.14	1.58	1.72	0	.03	0	•03	1.75	0	1.75	12	0	1.87	T	F	2		182	
	Av. cattle pasture	16	•75	1.39	2.13	0	.02	0	.02	2.15	0	2.15	•09	0	2,23	0	F	3		91	
	Cattle pasture		• • •														-		• -	V.3.	
	High land	8	4.47	2.66	7.13	T	0	0	T	7.13	0	7.13	0	0	7.13	0	M	1	5	0	
	Lew land	8	7.82	3.90	11.72	0	0	0	o o	11.72	0	11.72	0	0	11.72	0	N	_	T	0	
	Av. cattle pasture	_	6.15	3.28	9.43	T	0	0	T	9.43	0	9.43	0	0	9,43	0	NN M	0	3	0	
	WA GSTOTA DESCUE	TO	0 *10	0620		- 1	U		1		0		_	U	2040	U	A.TA	1	3	O	
	Sheep pasture	8	6.27	4.18	10.45	•03	0	•06	•09	10.54	0	10.54	•10	0	10.64	0	F	\mathbf{T}	4	0	
	Av. mederately																				
	grazed	40	4,39	2.95	7.34	.01	.OI	•02	♦04	7.37	0	7.37	•06	0	7.43	0	M	1	27	30	
He	avily grazed																				-
	Small herse-pasture																				
	High land	8	1.85	2,40	4.25	0	0	0	0	4,25	0	4.25	T	0	4.25	Т	M	0	0	0	
	Low land (flooded				-4.50					_,,,,			_		-9.00	-	±x.				
	June 6, 1932)	8	6.45	8.44	14.89	0	0	•05	•05	14,94	0	14-94	.31	0	15,25	0	VN	0	0	0	
	Av. herse-pasture	_	4.15	5.42	9.57	Ó	Ŏ	.03	.03	9.60	0	9.60	.16	Ö	9.75	T	N	0	0	0	
	_		4.53	-		0	_		-		0	10.83				_		_			
	Large sheep pasture	8	±400	6.29	10.82	U	0	•01	•01	10.85	U	T0 900	•11	0	10.94	•06	F	T	6	0	
	Average heavily	0.4	1 74	E 04	70.00	0	0	0.0	00	70.00	0	70.00	7.4	0	30 75	07		_			
	grazed	24	4.34	5,86	10.20	0	0	•02	•02	10.22	U	10.22	•14	0	10.35	•03	M	T	3	0	
Gr	and average																				_
	All grazed areas	64	4.37	4.11	8.48	LOI	Т	.02	.03	8,51	0	8,51	•09	0	8,60	.01	M	7	17	18	
	<u></u>	-			44.0		_	4 - 10	,,,,	0404			0-0		0900	901	187	Ju	17	TO	
	All areas	76	5.23	10.97	16.20	-01	Т	.02	▶03	16.23	T	16.23	.11	0	16.34	•01	M	٦	14	15	
_							-								00-2	901	141	-	7.4	JAJ	

^{*} Total vegetation includes all species, except amual forbs.

Net grazed for eleven years, except during the winter of 1934-35.

T-denotes a trace; M, medium; N, numerous and F, fow.

Bg-Bouteleus gracilis (Blue grams), Bd-Buchlee dactyleides (Buffale grass), Al-Aristida lengiseta (Wire grass), Sa-Sperebelus asper (Rough rush grass), Sc-Sperebelus cryptandrus (Sand drepseed), H-Hordeum pusillum (Little barley) and Tp-Triedia pilesa (Hairy Triedia).



Table Percentage of ground surface occupied by grasses, forbs and sedges on ungrazed, moderately grazed and heavily grazed areas in the vicinity of Colby and Rexford, Kansas, as charted with pantographs in June, 1935

								0																	
	No.							Gra	ss sr	ecies								Total		Tetal*		nual	No.	of	
Grazing and	of				rennial	gra								Annua						Tege-	fg	rbs	seed	lings	
watering	quad-		Short g					ll gra			Total			grass				Per &			Char-	Esti-	per	neter	
treatments	rats	Bg	Bd	Sp	Total	Asm	Sa	Sc	Spap	Total	Pere	F	H	Pc	Ua	Total	grass	Bien.	ges	tion	ted	mated	Bg	Bd	
						olby	Silt	Loam (Mediu	m-heav	y textu	re)	_												
In Vicinity of Colby Station																									
Not grazed																									
Dry land area,																									
ungrazed for 3 years	8	1.47	1.97	0	3.44	0	T	•05	0	•05	3.49	0	•05	.02	•40	47	3 ∳96	.18	•63	4.77	•45	VN	3	66	
Lawn watered in fall 1934	6	16.70	42.21	1.37	60.28	0	2.31	1.69	0	4.00	64.28	0	•40	.02	0	•42	64.70	•39	1.56	66.65	0	0	0	0	
Average not grazed	14	9,09	22.09	•69	31.86	0	1.16	87	0	2.03	33,89	0	•23	.02	•20	•45	34.33	-29	1.10	35.71	.23	M	2	33	
Moderately grazed																									
First location	8	4.06	2.73	0	6.79	0	0	•30	0	•30	7.09	0	₀ 03	m	40	51	F 40	7.6	10	T .04	40	THE	0	-	
Second location	8	2.93	2.18	0	5.11	0	0	.02	T	.02	5,13	0	_	T	•48	•51 •35	7.60 5.48		•10	7.86	•40	MA	0	1	
Average mod grazed	16	3.50	2.46	0	5.95	_	0	16			-	_	T	T	•35	-		-	T	5.60	.10	VN	5	19	
	10	3 930	20 40	U	20 82	0	U	€T0	T	•16	6.11	0	•02	T	•42	•43	6.54	•14	,05	6.73	•25	VN	3	10	
Heavily grazed																									
East of Colby Station	8	•11	2.15	0	2.26	0	0	•68	0	•68	2,94	0	.06	•03	•35	•44	3.38	.02	÷11	3.51	•66	M	1	24	
		7 07	. 77					4.0	_														_		
Average all grazed areas	24	1.81	2.31	0	4.11	0	0	•42	T	•42	4.53	0	•04	.02	•39	•44	4.96	•08	•08	5.12	46	N	2	17	
40.000 .22	7.0	4 07			7.00				_												-				
Average all areas	38	4.23	8.90	0	13,36	0	•39	•57	T	•96	14.31	0	•10	•02	•32	44	14,75	•15	•42	15.32	•38	М	2	22	
On Foster Farms (20 miles N.E.	of Co	lbv. K	an sas)																						
Moderately grazed	5	6.06	14.08	T	20.14	0	0	•27	0	-27	20.41	.05	•22	0	•02	.29	20.70	.05	0	20.75	-10	3/5	3	10	
Heavily grazed	5	5.37	21.06	Ť			0	T	0	27	-	-14	44	T	0	•58	27.28	11	•05	27.44	67	0	2	13	
Very heavily grazed	5	5.50	28.48	ጥ			0	•03	0		34.17		.44	0	0	•47	34.64	-	0	34.66	20	F	0	0	
Ave. all grazed areas	J	0 .00	20070		20.000	•10	U	•00	O	€T2	OHOTI	•00	0 TT	O	U	0.21	01001	*UE	U	04400	•20	2	O	U	
near Rexford.	15	5 64	21.21	m.	26.85	7.4	0	•10	0	24	27.09	OF	70	Т	TO.	45	27.54	06	.09	27.62	39	F	2	8	
Tegl Verloid	141	0.04	ST PST	1	20 400	• T.T	U	•10	U	● K/±	27.009	•07	901	T	POT	920	21604	•00	302	21602		E .	<u>د</u>	0	
Grand average, all locations																									
Not grazed	14	9.09	22.09	-69	31.86	0	1.16	-87	0	2.03	33.89	0	.23	•02	.20	.45	34.33	29	1.10	35.71	.23	M	2	33	
Moderately grazed	21	4.78	8.27	T	13.05	0	0	-22	T		_	•03	.12	T	-22	.36	13.62	-	.03	13.74	18	N	3	10	
Heavily grazed	13	2.74	11.61	T T	14.35	_	0	•34	0	-	14.82		-25	.02	.18	<u>.51</u>	15.33	.07	_	15.48	67	F	2	19	
Very heavily grazed	5	5.50	28.48	T.	33.98	-	0	•03	0	-	34.17	-	44	0	•10	47	34.68	-02		34.66	20	F	0	0	
All grazed areas	39	4.11	13.65	ጥ	17.75	-	0	-23	υ Tr		18.07	-	24	•01	•16	-44	18.51	.07	.04	18.62	38	м	2	11	
All areas				_		-	_		T T			_		•01	.17	.44	21.15	.11	-22	21.47	•35	M	2	15	
ALL STEERS	53	4.94	15.05	,1 2	20.10	007	•19	•34	T	•60	20.70	•04	•24	POT	977	• 44	STOTO	911	• 66	WT 0.E.	•00	ш	~	200	

^{*-}Tetal vegetation includes all species of vegetation, except amual forbs.

T-Trace or less than .Ol percent, F-few, M-medium, VN-very numerous.

Bg-Bouteloua gracilis (Blue grama), Bd-Buchloe dactyloides (Buffalo grass), Sp-Schedonnardus paniculatus (Tumblegrass), Asm-Agropyren smithii (Western wheat grass), Sa-Sperobelus asper (Rough rush grass), Sc-Sporobelus cryptandrus (Sand dropseed), Spsp-Sporobelus species, Fe-Festuca ectoflora (Slender fescue), H-Hordeum pusillum (Little barley), Pc-Panicum capillare (Witch grass), Ua-Unknown amual.

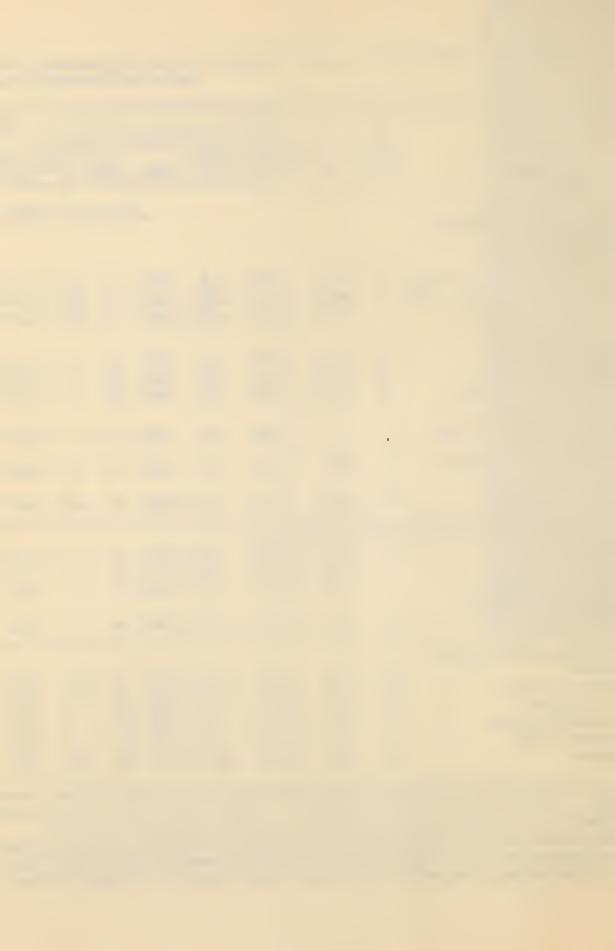


Table _____ Percentage of ground surface occupied by grasses and forbs on ungrazed, mederately grazed and heavily grazed areas on different types of soil in the vicinity of Woodward, Oklahema, as charted with pantegraphs in May, 1935.

	No.									Gra	ss sp	ecies									Total	Tetal
	of					Pere	mia	l gra									Annual					vege-
Grazing	quad-		Short							all gr				Total	_		grasse				Perek	
treatments	rats	Bg	Bđ	Sp	Тр	Total	Af	As	Al	Be	Ps	Sc	Total	Pere	CA	Fo	H	Sne	Total	grass	Bien.	tion*
										3 to - 03		0.										
									51	lty Cl	ay Lo	em Se	11									
Heavily grazed	13	2.66	15.22	۰03	0	17.91	0	•01	•27	2.08	0	T	2,36	20.27	•06	•04	0	0	.10	20.37	•24	20.61
Very heavily grazed	10	. 56	16.54	.12	0	17.22	•01	0	•06	.45	0	•04	•56	17.78	•01	•02	0	•01	•04	17.82	.37	18.19
										_												
Average	23	1,61	15,88	•08	0	17,57	•01	•01	•17	1.27	0	•02	1.46	19.03	•04	•03	0	.01	•07	19.10	.31	19.40
										C 3 :		0-47										
										Sandy	l'o em	5011										
Net grazed	5 1	3.24	18.27	0	0	31.51	0	0	0	0	•02	2.89	2.91	34.42	0	0	3.06	0	3.06	37.48	•37	37.85
Very moderately grazed	1 5 1	4.94	9.50	0	•02	24.46	.10	0	•13	T	0	1.48	1.71	26.17	0	•03	4.69	0	4.72	30.89	1.06	31,95
Average	10 1	4.09	13.89	0	•01	27,99	•05	0	•07	T	•01	2.19	2.31	30.30	0	•02	3,88	0	3.89	34.19	.72	34.90
												•					_					
									В	oth Ty	pes o	r Soi	1									
Grand Average																						
All grazed areas	28	6.05	13.75	.05	•01	19.86	004	T	•15	•84	0	•51	1.54	21.41	•02	.03	1.56	T	1.62	23.03	:56	23 ₆ 58
All areas	33	7.85	14.88	•04	•01	22,78	•03	T	•12	•63	•01	1.10	1.89	24.66	.02	02	1.94	T	1.98	26,64	•51	27.15

^{*} Total vegetation includes all species except annual forbs.

T-indicates a trace or less than .01 percent.

Bg-Bouteleua gracilis (Blue grama), Bd-Buchlee dactyleides (Buffale grass), Sp-Schedonnardus paniculatus (Tumble grass), Tp-Triodia pilesa (Hairy Triodia), Af-Andrepegen furcatus (Big Bluestem), As-Andrepegen sceparius (Little Bluestem), Bc-Bouteleua curtipendula (Side cats grama), Ps-Panicum scribnerianum, Sc-Sperebelus cryptandrus (Sand drepseed), Cv-Chloris verticillata (Windmill grass), Fo-Festuca octoflora (Slender Fescue), H-Hordeum pusillum (Little barley), Sne-Sperebelus neglectus (Small rush grass), Al-Aristida longiseta (Wire grass).



Table Percentage of ground surface occupied by grasses, forbs and sedges on ungrazed, moderately grazed and heavily grazed areas on different types of seil in the vicinity of North Platte, Nebraska, as charted with pantegraphs in June, 1935

	No.													Gr	183 8	pecie	8															
	of									Pere	mial	gre	13808											Am	าลใ		Tatol	Tetal ferbs				ual
Grazing	quad		Sì	ert gra	18368								Tal	gre	18868							Total			sses		all	Peroc			fer Char-	
treatments	rats	Bg	Bh	Bd	Sp	Total	Apa	Aam	AT	As	Al	Bo	Clo	Hi	Ps	PY	Se	Sa	Sc	Sco	Total	Pere.	Fe		Sne	Tetal	grass	Bien				
								nC.	lhv	7 Vam	r Rin	9 9	nn 3- 1	mo a l	Seil	(Tn	wici	ni tu	of K	anth	Platte	Oto to a	. \								-	- Tou
																				or ar			-de									
Net grazed for 8 years	5	27.41	0	8.22	0	35.63	0	2.43	0	0	•09	0	0	0	T	0	0	•6I	.04	Q	3.07	38,70	1.08	Q	0	1.08	39.78	.31	.16	40.25	•47	18
Very mederately grazed	=	04.70	0	30 00	07	77 OF	0	00	0	0	7.0				_	0	0	00	3.0	0	412											
Level upland		24.19		13.75 6.75	*0T	37.95 16.81		•09	0	5.98	-12	0	0	.04		0	0	•06	.01	0		38.38		0	0	•33	38.71	•10	1.45	40.26	T	172
Sleping hill tep Ave. V. Med. grazed		17.13		10.25	.01	27.38		.17		2.99		0	-	•02		0		.03		•93 •47		24.53 31.46		0	0		25.03	•28		25.72	${f T}$	50
Mederately grazed	20	71970		10800	902	21 400		(ala 1		2000	901	0	O	402	0			•00		921	7,00	01.40	.42	0	0	•42	31.87	•19	•93	32.99	T	111
Nearly level upland	5	21.75	0	17.17	0	38.92	0	•35	0	0	.38	0	0	0	0	0	0	T	.12	1.24	2.09	41.01	•06	0	0	.06	41.07	•08	04	41.19	•08	17
Sleping hill tep	5	8.95	.01	14.70	.01	23.67	0	0	0	1.08	•64	•54	0	0	0	0	0	T	•58				.09	0	0		27.98	-		32.35	10	20
Ave. Mod. grazed	10	15.35	•01	15.94	.01	31.25	0	•18	0	•54	•51	•27	0	0	0	0	0	T	•35	1.31		34.45	•08	0	0		34.53	-		36.77		
Heavily grazed fer																												• == :				
25 years	5	26.67	.04	40,53	0	67.24	0	•06	0	0	•03	0	0	•01	0	0	0	0	•01	0	•11	67.34	•43	0	•06	•49	67.83	•33	•01	68.17	1.00	48
Ave, all grazed areas	25	19.72	.02	22.24	.01	41.96	0	.14	0	1.18	•29	•09	0	.01	0	0	0	•01	•14	•59	2.45	44.42	•33	0	.02	•33	44.74	•23	1.01	45.98	•36	59
Ave. all areas	30	21.64	.01	18.74	•01	40.38	0	•71	0	•88	•24	.07	0	.01	T	0	0	•14	•12	•45	2,61	42.99	•50	0	•02	.52	43.50	.25	•80	44.55	•39	50
								1	Vale	mtine	n Lo	amv	Sand	to I	nine S	Sand	(Ten	mil.	es no	rth o	f North	Platte)									
Not grazed	5	3.89	0	0	0	3 .89	T			•08			2,61		T		0			.53				0	0	•01	12,74	.77	2.66	16.17	_01	11
Very Mod. grazed	5	8.74	-81	3.50	0	13.05	0	.19	•05	8.06	T		1,66		•18	.18	•05			•19	15.38	28.43	•45	.19	0	.64	29.07		-	30.94		54
Moderately grazed	5	16.00	•26	0	0	16.26	0	•34	•55	2.44	0	0	2.11	0	•10	.22	.04	0	4.05	•24	10.09	26 • 35	•03	•03	0	•06	26.41	1.53	1.71	29.65	.02	2
Heavily grazed	5	15,42	•60	0	0	16,02	0	0	.03	3.05	0	0	•92	0	•10	•27	0	0	4.16	•03	8,56	24.58	•48	0	0	•48	25.06	•69	•55	26.30	•08	5
Ave. all grazed areas	15	13.39	•56	1.17	0	15,11	T	•18	.21	4.52	T	0	1.56	0	•13	.22	.03	0	4.34	•15	11.34	26,45	.32	.07	0	•39	26.85	•94	1.17	28.96	•05	20
Ave. all areas	20	11.01	•42	•88	0	12.31	T	.13	•28	3.41	T	0	1.83	0	•10	.17	.02	0	4.54	•25	10.72	23.02	•24	•06	0	•30	23.32	•90	1.55	25.77	•04	18
														Bet	h Typ	pes o	f Se	il·														
Grand average																																
Not grazed		15.65	0	4.11		19.76		1.22	-							0				•27	-	25.72	•55	0	0		26.26	_	-	28.21		15
Very Med. grazed		12.04	.41	6,488	•01	20.22		_	-	5.53	-		1,33			•09	-	-	-	•33	9.73	29.95	•44		0	-	30.47		-		.02	83
Mederately grazed		15.68	.14	7.97	•01	23,76	0			1.49					•05		•02		-	•78		30.40	•06	_	0	-	30.47 46.45	1.35 .51			•06 •54	27
Heavily grazed All quadrats		21.05	-32	20.27		41.63				1.53			46		_	14	0	-		₀02 ₀35		45.96 33.01	.46 .37	0 .03	.03	-	33,41	-	_	35.16	-	
ALL quadrats	90	16.33	.22	9.81	T	26.34	T	o42	● 14	2.15	♦T%	100	• AT	T	•05	•08]	MIN.	•07	2400	100	0 000	00101	•01		901							
							_		_						-																	

^{*} Tetal vegetation includes all species except amual forbs.

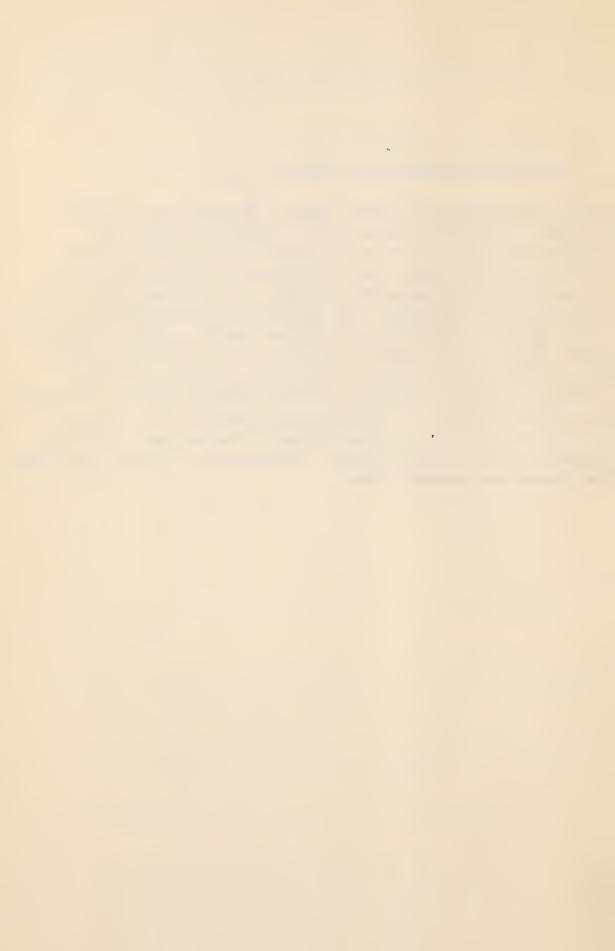
^{**} Number of uncharted annuals per square meter T denotes a trace or less than .01 percent.

Bg-Beuteleua gracilis (Blue grama), Bh-Bouteleua hirsuta(Hairy grama), Bd-Buchlee dactyleides (Buffale grass), Sp-Schedennardus paniculatus (Tumble grass), Apa-Agropyren pauciflorum (Slender wheat grass), Asm-Agropyren smithii (Western wheat grass), Af-Andropegen furcatus (Big Bluestem), As-Andropegen scoparius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Beuteleua curtipendula (Side eats grama), Cle-Calamovilfa longifolia (Long-leaved reed grass), Hj-Hordeum jubatum (Squirrel-tail), Ps-Panicum scribnerianum, Pv-Panicum virgatum (Switch grass), Se-Sphenepholis obtusata (Prairie wedge grass), Sa-Sperebelus asper (Rough rush grass), Sc-Sperebelus cryptandrus (Sand drepseed), Sce-Stipa comata (Needle grass), Fe-Festuca octeflera (Slender fescue), Pc-Panicum capillare (Witch grass), Sne-Sperebelus neglectus (Small rush grass).



Additional	footnote	for	Table	
			The same of the sa	-

Bg-Bouteloua gracilis (Blue grama), Bh-Bouteloua hirsuta (Hairy grama), Bd-Buchloe dactyloides (Buffalo grass), Sp- / Schedonnardus paniculatus (Tumble grass), Apa-Agropyron pauciflorum (Slender wheat grass), Af-Andropogon furcatus (Big Bluestem), Al-Aristida longiseta (Wire grass), Clo-Calamovilfa longifolia (Long-leaved reed grass), Hj-Hordeum jubatum (Squirrel-tail), Psp-Panicum species, Pv-Panicum virgatum (Switch grass), Sa-Sporobolus asper (Rough rush grass), Sc-Sporobolus cryptandrus (Sand dropseed), Rf-Redfieldia flexuosa (Blow-out grass), Sco-Stipa comata (Needle grass), Bt-Bromus tectorum (Downy Brome), Fo-Festuca octoflora (Slender Fescue), H-Hordeum pusillum (Little barley), Ms-Munroa squarrosa (False buffalo grass), Pc-Panicum capillare (Witch grass), Ssp-Setaria species, Sv-Setaria viridis (Green foxtail) and Ua-unknown annual grass.



																				-,														
	No.								-					Grase s	spec ie	33											Total	To-	Total		Annual		No.	of
	of								Perem												Anr	ual				Total	forbs	tal	Vege-		forbs		seedl	inea
Grazing	quad		Shor	rt gras Bd		Total	Ann	A am	AT AT	C16	HI	grasse	Der	Rf Sa	Co	200		Total	704 75	77	gra	25566				all.	Par &	- hap	to	Char	Coun	Date.		
treatments	rate	Bg	BAIL	Da	30	10 081	Apa	Won!	AT THE										Bt F		Ma	Pc S	sp i	Sv Ua	Total	grass	Bion.	ges	tion*	tod	tod	mated	Bg	Bd
svily grazed											OT4	y Loan,	50	miles S	ielle C	OI AKT	on, ne	er Las	st Chen	ĊӨ														
Sheep pasture	10	7.74	0	8.73	0	16.47	0	0	0 0) (0 (0	0	0 0	0	0	0	10.47	0.0	3 0	0	0	0	0 0	.03	16.50	83	0	10 10	OE	47			
Cattle pasture		8,50	0	5.73	T	14.23	0	•06	0 0)]	0 2	0	0	0 .02	Т	0		14.31	0 .1) 0	0	0	0 0		14.46			17.13 16.83		30	-	Ţ	2
Average		8.12		7,23	T	15.35	0	•03	0 0	7	0 2	0	0	0 .01	T	0		15.39	0.0		_	0	_	0 0		15.48			16.98		18 12		0	0
													5	Bilt Los	m., Ak	cron S	tation	1								20010	200		10830	.02	TE			
t grazed	10	16.37	0	1.47	т	17.84	0	0	0 0		0	0 .	.∩๑	0 0	0	0	.02	- ነን ወደ	.02 .0	3 00		ΛE	^	0	3		-0							
R.R. right of way leratoly grazed	100	10,01	U	Teal	_	11001	•		0 0		, 0	•	302	0 0	U	U	\$U.E	11,00	•02 •0	3 .UX	0 .	UD	0	0 T	•12	17.98	.73	•02	18.73	•11		M	0	0
Deferred paeture	10	2.06	0	6.16	0	8.22	0	0	0 .06		0 (0	0	0 .26	.24	0	_* 56	8.78	0 -0	8 .02	2 .03	05	0	0 0	10	8.94	30	4 70	17 50	-00	117			
avily grazed												_		0 850	9.0.1			0.10			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.00	O	0 0	•10	OPAT	•99	4.00	13.72	.29	111		0	0
Horse pasture	10	5.29	0	5.35	0	10.64	0	0	0 T		0	0	0	0 0	0	0	0	10.64	0.0	5 0	0	0	0	0 0	.05	10.69	.15	-08	10.90	.02		М	2	A
Sheep pasture		5.18		5.52		10.70	0	0	0 .02		0	0	0	0 .05	0	0		10.77	0 .1			_		02 0		10.94			12.37			N	0	0
Sheep pasture		.02		16.52		16,54	0	0	0 .23	(0	0	0	0 .08	.32	0		17.15	0.0		•06	T		0 0		17.29			17.43	-	76	7.4	0	0
Average		3.50		9,13		12.63	0	0	0 .08	C	0	0	0	0 .04	.11	0		12,85	0 .0		20.			01 0		12.97			13.57		76	N	1	1
y heavily grazed	10	6.44	0	4.50	0	10.94	0	0	0 0	C	0	0	0	0 0	•06	0	•06	11.00	0	т о	.02	0	0	0 0		11.02			11.06			M	0	1
, all grazed areas	50	4.00	Тı	6.60	T	10.60	0	0	0 .05	C	0	0	0	0 •10	•14	0		10,88	0 .0		. 02	.ne	Т	T O		10.98			12.78		94	24	Т	Ψ
		7.09		5,32		12.41	0	0	0 .04		0	0.	01	0 .08		0			.01 .0					TT		12.73			14.27		94	M	_	T
. all areas .tivated field, aban-		7.608	1	0002		TOOIT			0 401	`		•	OI	0 .00	*TO	Ü	8 6.65	TEGUE	*01 *0	0 002		, 00	_	1 1	PIT	12470	POT	Tem	14.27	•48	84	Est	Т	Т
doned in 1908	10	*02	0	5,50	06ء	5.58	.02	0	0 .31		Т	.02	.02	0 .23	1.31	0	1.91	7.49	0 .1	5 .18	85 .	.02	0	0 0	1.20	8.69	.16	.02	8.87	1.34	-	VN	0	0
														Sand, 1																				
grazed					_														*			_		_										
Hey meadow	10	1.92	1.74	T	0	3,66	•03	.26	34 0	•87	0	.02 .	42	0 .05	•34	3.08	5.41	9.07	0	0 0) 0	0	0	0 0	0	9.07	1.92	.97	11.96	.03	5		0	0
orately grazed	10	6.42	0	0	0	6.42	0	0.	10 0	1.37	0	0 •	03	0 Т	.26	•53	2.29	8.71	0 •0	2 0	0	0	0	0 0	.02	8.73	•52	.20	9.45	1.11	15		0	0
wily grazed	10	4.95	.16	0	0	5.11	0	•10	0 T	•37	0	0	0	0 .11	•90	۰29	1.77	6.88	0	т 0	.10	0	0	0 0	•10	6.98	1.45	.02	8,45	.82	105		0	0
all grazed areas	20	5.69	•08	0	0	5.77	0	.05 .	05 T	. 87	0	0 .	02	0 .06	•58	•41	2,03	7 •80	0 .0	1 0	•05	0	0	0 0	•06	7.86	-99	.11.	8,95	.97	60		0	0
o all areas	30	4.43	•63	т	0	5 .06	¿01	.12 。	15 T	•87	0	.01 .	15	0 .05	•50	1.30	3.16	8.22	0 .0	1 0	•03	0	0	0 0	•04	8.26	1,29	.40	9.95	.65	42		0	0
wily grazed												וע	me S	Sand, 18	mile	s N.W	of A	kron																
Sage-sand type																																		
Ankle's paeture	5	2.69	0	0	0	2.69	.15	48	11 0	•11	. 0	0	0	0 0	•31	.31	1.47	4.16	0	T 0	0	0	0	0 0	T	4.16	2.16		6.37		147		0	0
Stockwell's paetu			.02			4.15				.94		0	0	ОТ					0	0 0	0	0		0 0			3.02		10.19		48		_	0
Average		3.41		0	0	3,42	.21	.25 .	15 0	•53	0	0	0	O T	.62	.34	2.09	5.51	0	T 0	0	0	0	0 0	T	5.51	2.59	.19	8,28	.04	98		0	0
Yucca-sand type																												• 5			0.0		0	0
Anklo's pasture		1.29		0	0	1,42	•05	0	0 0	.26	0			18 •03				1.99	0	0 0	0	0		0 0		1.99			2.89		98		0	
Stockwell*e pastu:	rel0	1,00	.02	0	0	1,02	•05	T .		.02				.08 Т				1.47		0 0		0		0 0		1.47			4.82		103		0	
Average	15	1.15	.08	0	0	1.22	05,	Т.	02 0	•14	0	0	0	.13 .02	•05	·II	.51	1.73	0	0	0	0	0	0 0	0	1.73	2.08	405	3.86	•05	101		U	9
Average heavily													_	07 07	72.4	0/7	7 70	7 40	0	ш О	0	0	0	0 0	T)	3.62	2.34	.12	6.08	.05	100		0	0
grazed	25	2.28	•05	0	0	2,32	.13	.13 .	09 0	•34	. 0	0	0 4	07 .01				3.02	0	1 0	0		-	0 0	<u>.</u>	0202	2001	8.4.60	0,00					
nd average														All	Soil	Type	3																	
Not grazed	20	9.15	. 27	•74	ר ות	10 75	0.9	13	17 0	ΔΛ	. 0	.01 .	22	0 .03	•17	1.54	2.72	13.47	.01 .0	2 .01	0 .	02	0	OT		13.53			15.35		5	M	-	0
Moderately grazed		4.24		3.08					05 .03			0		0.13					0 .0					0 0					11.59		63	\7	0	0
Heavily grazed				4.09					02 .02					02 .04				9.69			.03	T	_	T O		9.76			11.27			H	0	1
Very heavily grazed	10	6. 44		4,50					0 0		0			0 0								0		0 0		11.02			11,06		70	L:	T	1
				3.86					01 .02			0	т.	01 .06	.27	.15	.89	9.60	0.0					T O		9,68			11.33		61	11	$\hat{f T}$	
111 areas **				3.17								T .	05	01 .05	، 25	•46	1.30	10.46	T .0	3 T	.02 .	01	T	TT	•07	10.53	1.00	30	16,466			n 1908		=

Total vegetation includes all species, except annual forbs. T-indicates a trace or less them .01 percent, M-many, N-numerous. ** This does not include the cultivated field abandoned in 1908.

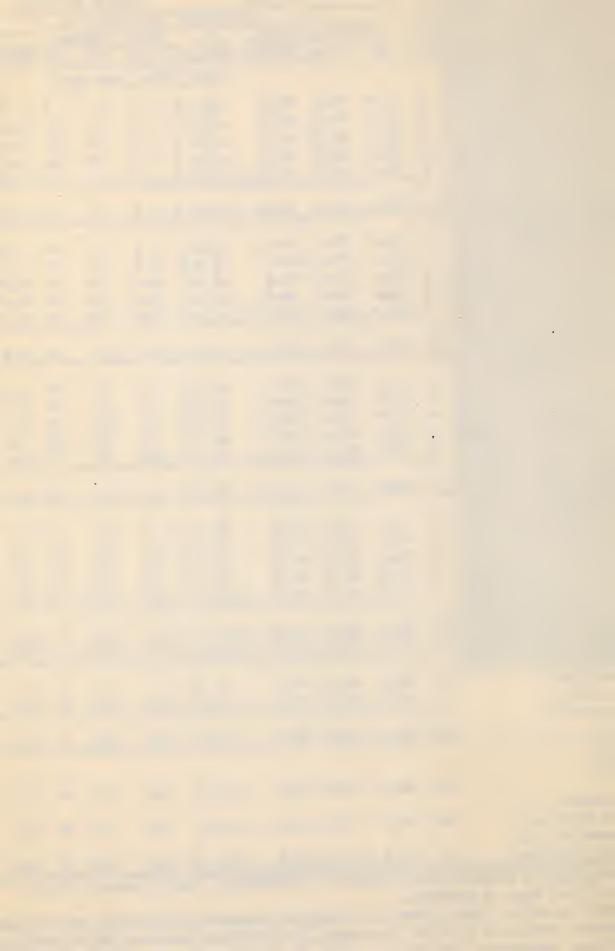


Table _____. Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover on ungrazed, moderately grazed and heavily grazed areas in the vicinity of Hays, Kensas in May, 1935.

	_				_	_		_				_	_					
Grazing or	No.							888	pecie	В							Total	To-
clipping	of				erenn								Am	nual		Total	forbs	tal
and watering	quad		ort gr				Tall	grass			Total		gr	asses		all	Per.&	sed-
treatments	rats	Bg	Bd	Total	Asm	AB	Al	Вс	Sc	Total	Pere.	C∇	Fo	H	Total	grass	Bien.	ges
					Sil	tv C	lay L	oam S	611									
Dry Land Lawns:						400		-										
Clipped 1/2 in.	2	8.0	91.7	99.7	0	0	0	0	0	0	99.7	0	0	0	0	99.7	•3	0
Clipped 1 1/4 in.	8	30.4	67.3	97.7	•3	•1	0	0	•6	1.0	98.7	0	0	0	0	98.7	•3	1.0
Clipped 2 in.	2	44.6	53.0	97.6	•7	0	0	0	1.5	2.2	99.8	0	.1	0	•1	99.9	.1	0
Cut twice yrly. 1 1/4 in	. 2	39.6	57.1	96.7	1.2	0	0	0	2.0	3.2	99.9	0	0	0	0	99.9	0	0
Not cut	2	38.2	39.1	77.3	3.7	0	0	0	.7	4.4	81.7	0	0	0	0	81.7	18.3	0
Average dry land																		
lawns	16	32.2	61.6	93.8	1.2	T	0	0	•6	2.2	96.0	0	\mathbf{T}	0	T	96.0	3.8	.2
Lightly Watered Lawns:																		
Clipped 1/2 in.	2	5.9	93.2	99.1	•2	0	0	0	0	•2	99.3	0	0	Т	Т	99.3	•7	0
Clipped 1 1/4 in.	2	15.9		100.0	0	Ō	0	0	0	0	100.0	Ō	0	ō	ō	100.0	T	0
Clipped 2 in.	2	22.1	73.8	95.9	•5	Ō	2.8	0	0	3.3	99.2	.4	Ō	.1	•5	99.7	•3	0
Cut twice yrly. 1 1/4 in		41.6	52.3	93.9	1.4	Õ	.8	Ö	1.4	3.6	97.5	0	0	1.9	1.9	99.4	•6	0
Not cut	2	38.6	48.1	86.7	1.1	0	2.8	Ô	0	3.9	90.6	Ö	0	2.7	2.7	93.3	6.6	•4
Average lightly			-441				200				24.60			201	2001	1010	5.0	• =
watered lawns	10	24.8	70.3	95.1	.6	0	1.3	0	•3	2.2	97.3	•1	0	•9	1.0	98.3	1.6	•1
Heavily Watered Lawns:	10	DISO	70.80	POST			1.0		•0	2 82	57 40	91		• 5	1.00	80 80	1.00	•±
Clipped 1/2 in.	2	1.5	97.8	99.3	•1	0	0	0	0	•1	99.4	•1	0	.1	•2	99.6	•3	0
Clipped 1 1/4 in.		14.0	84.6	98.6	0	0	0	0	0	0	98.6	.2	0	•8	1.1	99.7	•3	0
	2				-				-	_			-					-
Clipped 2 in.	2	33.9	62.4	96.3	T	0	•1	1.0	0	1.1	97.4	0	0	.4	.4	97.8	2.1	0
Cut twice yrly. 1 1/4 in		24.5	65.2	89.7	•1	0	0	0	•2	•3	90.0	•7	•2	8.5	9.4	99.4	•5	0
Not cut	2	37.7	53.6	91.3	0	0	4.1	0	•3	4.4	95.7	0	.2	•8	1.1	96.8	3.2	0
Average heavily					_	_			_			_	_					
watered lawns	10	22.3	72.7	95.0	T	0	.8	.2	•1	1.2	96.2	•2	•1	2.2	2.4	98.7	1.3	0
Average All Lawns:																		
Clipped 1/2 in.	6	5.1	94.2	99.4	•1	0	0	0	0	•1	99.5	${f T}$	0	T	.1	99.5	•4	0
Clipped 1 1/4 in.	12	20.1	78.7	98.8	•1	T	0	0	•2	•3	99.1	•1	0	•3	.4	99.5	•2	•3
Clipped 2 in.	6	33.5	63.1	96.6	.4	0	1.0	•3	•5	2.2	98.8	•1	T	•2	•3	99.1	.8	0
Cut twice yrly. 1 1/4 in	. 6	35.2	58.2	93.4	.9	0	•3	0	1.3	2.4	95.8	.2	.1	3.5	3.8	99.6	.4	0
Not cut	6	38.2	46.9	85.1	1.6	0	2.3	0	•3	4.2	89.3	0	•1	1.2	1.3	90.6	9.4	.1
Average all watering and																		
clipping treatments	36	26.4	68.2	94.6	•6	0	•7	.1	₀ 3	1.9	96.5	.1	T	1.0	1.1	97.7	2.2	•1
Moderately grazed:	6	40.6	58.7	99.3	•5	0	0	0	0	•5	99.8	0	0	0	0	99.8	•3	0
Heavily grazed:																		
First location	32	34.3	64.9	99.2	0	0	0	0	•8	•8	100.0	0	0	0	0	100.0	0	0
Second location	9		64.6	_	T	0	•1	Ô	•4	•5	93.2	T	Ō		6.5	99.7	.2	0
Average heavily		SOST	0280	0001			91		• -	•0	7765			- 40	- 40			
grazed	21	31.2	64.8	98.0	T	0	.1	0	•6	•7	96.6	Т	Ω	3.3	3,3	99.9	.1	0
Grand Average:	SALE.	OTAL	0240	0040	1		9.1		•0		0080							
All grazed	6.7	GE A	63 0	08.5	P	_	-	^	G.	~	00.0	m	0	1 77	1 77	00.0	•2	0
87688	27	22.8	61.8	97.7	•3	0	•1	0	•3	•6	98.2	T	0	1.7	1.7	88 * 8	46	
All treatments				0.0				_			00.5		(T)	1 1	2 2	00 6	1.4	.1
except watering	43	34.7	61.7	96.4	•6	T	T	0	•4	1.1	97.5	T	T	1.1	1.1	98.6	1.4	• 1
All treatments, in-									_		0.5			2 2	2.2	00 5	1.4	1
cluding watering	63	30.2	65.6	95.8	•5	T	•4	T	•3	1.4	97.2	.1	T	TeT		98.5	1.4	• <u>↑</u>

^{*} Total vegetation includes all species of vegetation, except amnual forbs.

T-trace or less than .1 percent.

Bg-Bouteloua gracilis (Blue grama), Bd-Buchloe dactyloides (Buffelo grass), Asm-Agropyron smithii (Western wheat grass), As-Andropogon scoparius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Bouteloua curtipendula (Side oats grama), Sc-Sperobolus cryptandrus (Sand dropseed), Cv-Chloris verticillata (Windmill grass), Fo-Festuca octoflora (Slender Feacus), H-Hordeum pusillum (Little barley).



Table ___ Percentage of total vegetation* contributed by different species and classes of herbscious vegetation as indicated by the relative ground cover of ungrazed, moderately grazed and heavily grazed areas on the different types of soil in the vicinity of Dalhart, Texas in June, 1935.

Series S								101111	, O1		,,	10261		5 till 5	, 180	•								
Clipping													cies											Total
trestments								Per	emi	al gr	8386								E	mua	J			
City Leam Sell [30 miles east of Delhart] North of Etter 10 52.0 0 50.1 1 0 91.1 0 0 0 0 0 0 1.4 0 1.4 02.5 0 .5 .4 0 .9 03.4 0.0 North of Etter 10 53.1 0 44.1 .3 0 97.5 0 0 0 0 0 0 .3 0 .3 0 .3 07.8 0 0 0 0 0 0 7 7 7 Are bearily grazed North of Etter 10 55.1 0 44.1 .3 0 97.5 0 0 0 0 0 0 0 .3 0 .3 0 .3 07.8 0 0 0 0 0 0 7 7 7 Are bearily grazed 20 53.1 0 44.1 .3 0 97.5 0 0 0 0 0 0 0 .3 0 .3 07.8 0 0 0 0 0 0 7 7 7 Are bearily grazed 20 53.1 0 44.1 .3 0 97.5 0 0 0 0 0 0 0 .3 0 .3 07.8 0 0 0 0 0 0 0 7 7 8 2.1 Figure 10 50.1 1 2 0 94.5 0 0 0 0 0 0 0 .3 0 .3 07.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		_						m																
Moreth of Xtter 10	treatments	rate	Bg	Bh	Bd	Sp										Total	Pere.	C∀	Fo	H	Pc	Total	STEER	Bien.
Name to Exter 10 52.9 0 58.1 11 0 91.1 0 0 0 0 0 0 0 1.4 0 1.4 92.5 0 .5 .4 0 99 93.4 0.0	A. J						Cla	y Lean	Sei	.1 (30	mile	8 088	t of	Dall	hart)									
merth of Steer 10 55.1 0 44.1 .3 0 97.5 0 0 0 0 0 0 .3 0 .3 97.8 0 0 0 0 0 97.8 2.1 East of Exam 10 T 0 T 0 T 0 0 T 0 0 0 T 0 0 0 0 0 0	Merately grazeu	10	32 0		E0 3	7	0	03.3									0.0.5		_					
North of Fitter		10	3268	, 0	28*T	. 6.1.	0	81.1	0	0	0	0	0	1.4	0	1.4	92.5	0	•5	64	0	A 8	93,4	6.6
Task of Extent 10	BEALTA RESTOR	10	53.1	^	44.3	2	0	07 5		0							0.5							
Free heartly grand 20 53.1 0 44.1 43 0 97.5 0 0 0 0 0 0 3 0 .5 97.8 0 0 0 0 0 97.8 2.1 rege all grand for fyears Silty Clay Leam Soil (10 to 15 miles N.E. of Dalhart) Free heart 10 52.2 0 44.3 1.0 .5 98.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							_		_		_		_		_			_	_	_	_			
grazed reas 30 43.0 0 44.1 43 0 0 97.5 0 0 0 0 0 3 0 0 3 97.8 0 0 0 0 0 97.8 2.1 erags all grazed areas 30 43.0 0 51.1 2 0 94.3 0 0 0 0 0 0 0 0 0 98.0 0 49 95.2 0 63 62 0 5 95.6 4.4 tgrazed for Silvy Clay Leam Soil (10 to 15 miles N.E. of Dalhart) **Tender of the state of the		10	Т	U	T	. 0	0	T	0	0	0	0	0	0	0	0	T	0	0	0	0	0	Т	T
Friedrick Silvy Clay Leam Seil (10 to 15 miles N.E. of Dalhart) t grazed for 6 years		20	E2 3	^	44.3	77		08.5	_															
Series S		20	2261	. 0	44.1		U	9745	0	0	0	0	0	43	0	•3	97.8	0	0	O	0	0	97.8	2.1
Silty Clay Leam Seil (10 to 15 miles N.E. ef Delhart) 6 years 6 years 10 52.2 0 44.3 1.0 .5 98.0 0 0 0 0 0 0 0 0 98.0 0 .4 0 0 .4 98.4 1.7 6 years Richfield soil 10 37.5 0 34.4 0 0 71.9 0 0 0 0 0 3.1 0 3.1 75.0 0 T 0 0 T 75.0 25.0 Fullman seil 10 37.6 0 61.2 1 0 98.9 0 0 0 0 0 1.6 0 1.6 87.0 0 2 T 0 0 T 75.0 25.0 Fullman seil 10 37.6 0 61.2 1 0 98.9 0 0 0 0 0 1.6 0 1.6 87.0 0 2 T 0 0 2 87.2 12.8 Grazed Grazed Grazed Sendy Leam Seil (In vicinity of Delhart) t grazed Lightly clipped 10 85.4 0 4.5 0 0 89.9 0 0 0 0 0 4.6 0 5.5 95.4 0 0 0 0 0 0 5.4 4.6 Cleasly clipped 25 55.9 2 14.6 1.9 99.5 0 0 0 0 0 0 0 5.5 95.4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	rerage all	70	47 0		E3 . 1			04 5								0	05.0							
t grazed for foreing 10 52,2 0 44,5 1,0 .5 88,0 0 0 0 0 0 0 0 0 0 98,0 0 .4 0 0 .4 98,4 1.7 foreing grazed freinfield soil 10 37,5 0 34,4 0 0 71,9 0 0 0 0 0 0 3,1 0 3,1 75,0 0 7 0 0 7 75,0 25,0 Fullman seil 10 37,6 0 61,2 41 0 98,9 0 0 0 0 0 0 1 0 0 1,0 0 1,0 99,0 0 .4 7 0 0 7 75,0 25,0 Fullman seil 10 37,6 0 47,48 .1 0 85,4 0 0 0 0 0 0 1,6 0 1,6 87,0 0 .2 7 0 .2 87,2 12,6 foreign and the first seil 10 37,5 0 34,4 0 0 71,9 0 0 0 0 0 0 1,6 0 1,6 87,0 0 .2 7 0 .2 87,2 12,6 foreign and the first seil 10 85,4 0 45,1 6 .3 91,7 0 0 0 0 0 0 1,6 0 1,6 87,0 0 .2 7 0 .2 87,2 12,6 foreign and the first seil 10 85,4 0 4,5 0 0 89,9 0 0 0 6 0 0 0 0 1,6 0 1,6 87,0 0 .2 7 0 .3 7 0 .3 92,8 7,3 foreign and the first seil 10 85,4 0 4,5 0 0 89,9 0 0 0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	grazed areas	- 30	2010	- 0	2191												95,2	0	النو	42	0	65	85.6	4,4
Symbol 1						811	th CTs	TA TOBI	1 501	T (TC	to .	12 mil	.es N	وكلو (or Da	Inart)								
The field sold 10 37.5 0 34.4 0 0 71.9 0 0 0 0 3.1 0 3.1 75.0 0 T 0 0 T 75.0 25.0 Pullman seil 10 37.6 0 61.2 1 0 98.9 0 0 0 0 0 1 0 1 0 0 1 99.0 0 4 T 0 4 99.4 .6 Ave. Neds grazed 20 37.6 0 47.8 .1 0 85.4 0 0 0 0 0 1.6 0 1.6 87.0 0 .2 T 0 .2 87.2 12.8 rage all eross 30 44.9 0 46.1 .6 .3 91.7 0 0 0 0 0 .8 0 .8 0 .8 92.5 0 .3 T 0 .8 92.8 7.3 12.8 rages all excess 50 44.9 0 46.1 .6 .3 91.7 0 0 0 0 0 .8 0 .8 0 .8 92.5 0 .3 T 0 .8 92.8 7.3 12.8 12.8 12.8 12.8 12.8 12.8 12.8 12.8		3.0	E0 0		44 7	1.0	-	00.0	_							0	00.0						00.1	
Fitchfield soil 10 37.5 0 34.4 0 0 71.9 0 0 0 0 0 5.1 0 3.1 75.0 0 T 0 0 T 75.0 25.0 Pullman seil 10 37.6 0 61.2 al 0 98.9 0 0 0 0 0 0 1.0 0 1.0 0 1.0 0 4 T 0 4 99.4 .6 Ave. Node grazed 20 37.6 0 47.8 al 0 85.4 0 0 0 0 0 0 1.6 0 1.6 87.0 0 2 T 0 2 87.2 12.8 erage all grazed 20 37.6 0 44.9 0 46.1 a6 a 3 91.7 0 0 0 0 0 8.8 0 0 8 92.5 0 a3 T 0 2 87.2 12.8 erage all grazed 20 30 44.9 0 46.1 a6 a 3 91.7 0 0 0 0 0 8.8 0 0 8 92.5 0 a3 T 0 2 87.2 12.8 erage all grazed 20 30 44.9 0 46.1 a6 a 3 91.7 0 0 0 0 0 8.8 0 0 8.8 0 0 8 92.5 0 a3 T 0 2 87.2 12.8 erage all grazed 20 30 4.4 0 85.4 0 4.5 0 0 89.9 0 0 0 6.6 0 0 6.8 0 0 8.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		10	0242	. 0	****	T*0	•5	88.0	0	0	0	0	0	0	0	O	A8*0	0	.4	O	0	.4	98.4	1.7
Pullmam sell 10 57.6 0 61.2 cl 0 98.9 0 0 0 0 0 1 0 1 99.0 0 0 4 T 0 0 4 99.4 .6 Ave. Mede grazed 20 37.6 0 47.8 .1 0 85.4 0 0 0 0 0 1.6 0 1.6 87.0 0 2 T 0 2 87.2 12.8 Targes all Targes 30 44.9 0 46.1 .6 .3 91.7 0 0 0 0 0 8 0 8 92.5 0 3 T 0 3 7.0 93 92.8 7.3 Express 30 44.9 0 46.1 .6 .3 91.7 0 0 0 0 0 6 0 0 8 92.5 0 3 T 0 3 92.8 7.3 Express 55.4 0 4.5 0 0 89.9 0 0 .6 0 0 4.9 0 5.5 55.4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		30	70 E	^	34 4	0	0	71 0	^	0		0	_	72.3	^	7 1	DE O	^	CT?	0	^	CD.	DE A	06.0
Ave. Made grazed 20 37.6 0 47.8 .1 0 85.4 0 0 0 0 0 0 1.6 0 1.6 87.0 0 .2 T 0 .2 87.2 12.8 rage all eress 30 44.9 0 46.1 .6 .5 91.7 0 0 0 0 0 88 0 8 92.5 0 .3 T 0 .3 92.8 7.3 Expect							_		_	_		_			_			_	T'	_	_	- T		
Target ell eross Sandy Learness Sandy Learness Sandy Sand		10	3740	U	0102	8.1	U	AQ* A	U	U	U	U	U	6 1	U	φŢ	88 *0	U	• 1	T	U	•4	8804	•0
Targe all eross		90	30.4	^	47.0	7	0	9E 4	^	0		•	_	7 4	^	7 4	07.0	^	0	m	^		07.0	120
## cared 10 85.4 0 46.3 6 8 39 14.7 0 0 0 0 0 0 8 0 6 8 92.5 0 3 T 0 93 92.8 7.3 ## cared If n vicinity of Delhart Station		20	3740	U	4748		U	80.4	U	0	U	U	O	TPO	U	100	8740	0	62	Т	U	92	67.2	12.8
Sandy Leam Seil (In vicinity of Delhart Station) Lightly clipped 10 85.4 0 4.5 0 0 89.9 0 0 6 0 0 4.9 0 5.5 95.4 0 0 0 0 0 95.4 4.4 Clesely clipped 5 55.9 1 41.6 1.9 0 99.5 0 0 3 12 0 0 0 6.5 100.0 0 0 0 0 0 0 100.0 1 Average net grazed 15 70.7 1 23.2 1.0 0 94.7 0 0 5.5 1 0 2.5 0 3.0 97.7 0 0 0 0 0 97.7 2.3 deretely grazed Remas's pasture 10 78.6 0 17.3 .9 0 96.8 0 0 1.0 0 0 1.6 0 2.6 99.4 0 0 0 0 0 99.4 .6 avily grazed Delhart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T 2.2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 arage all grazed areas 20 64.4 0 28.8 .6 T 93.9 0 0 .5 .1 0 3.6 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 arage all grazed areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.6 0 4.4 98.3 0 .1 0 0 .1 98.1 1.9 Bend ge-sand type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 .2 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cas-sand type Med. grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 65.3 89.0 .2 0 0 0 .2 89.2 10.6 Bend types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 and average Net grazed 25 61.5 .1 33.8 1.0 89 66.4 0 0 .3 .4 3.8 .1 1.0 .1 .5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 25 61.5 .1 30.8 8.0 89 66.4 0 0 .3 .4 3.8 .1 1.0 .1 .5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 45.0 1.2 20.4 25.1 .4 6.8 70.4 85 0 .3 .4 3.8 .1 1.0 .1 .5 0 .1 .5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 46.5 1.4 2.1 30.8 8.3 .1 84.6 0 .3 .4 3.8 .1 1.0 0 .1 .5 15.9 92.4 T .3 .1 T .4 92.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.2 T 1.0 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.2 T 1.0 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 Benutelus grazel 10 10.2 20.7 5.2 3.8 2.5 .1 .1 8.8 2.2 T 1.0 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 Benutelus grazel 10 10.2 20.7 5.2 3.8 2.5 .1 .1 8.8 2.2 T 1.0 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 Benutelus grazel 10 10.2 20.7 5.2 3.8 2.5 .1 .1 8.8 2.2 T 1.0 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 Benutelus grazel 10 10.2 20.7 5.2 3.8 2.5 .1 .1 8.8 2.2 5.7 T 15.9 92.4 T .3 .1 T .4 92.8 7.2 Benute		30	44.0	_	44 7	a	72	03 77	^	0	_	0	^	. 0	0		00 5	^	77	m	^	GZ .	00.0	n 2
t grazed Lightly clipped 10 85.4 0 4.5 0 0 89.9 0 0 .6 0 0 4.6 0 0 4.6 9 0 5.5 95.4 0 0 0 0 0 95.4 4.6 Clesely clipped 5 55.9 .1 41.6 1.9 0 99.5 0 0 .3 2 0 0 0 .5 10.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	STORE	30	#200	U	40 °T												92.5	- 0	43	T	- 0	90	82.8	743
Lightly clipped 10 85.4 0 4.5 0 0 89.9 0 0 6.6 0 0 4.9 0 5.5 55.9 5.4 0 0 0 0 0 95.4 4.4 Clessly clipped 5 55.9 1 41.6 1.9 0 99.5 0 0 .3 2 0 0 0 5 100.0 0 0 0 0 0 0 0 0 100.0 .1 Average net grazed 15 70.7 1 23.2 1.0 0 94.7 0 0 .5 1 0 2.6 0 3.0 97.7 0 0 0 0 0 0 97.7 2.3 derately grazed Reuse's pasture 10 78.6 0 17.3 .9 0 96.8 0 0 1.0 0 0 1.6 0 2.6 99.4 0 0 0 0 0 0 99.4 .6 avily grazed Dahart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T .2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 areas all grazed areas 20 64.4 0 28.8 8 T 93.9 0 0 .5 1 0 3.8 0 4.4 98.3 0 1 0 0 0 1 98.4 1.7 areas all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 1 0 3.8 0 4.4 98.3 0 1 0 0 0 1 98.4 1.7 areas all grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cases and type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 6.1 3.9 0 1.4 0 68.3 89.0 .2 0 0 0 .2 89.2 10.6 erase beth sand types 30 28.3 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 and average Net grazed 40 56 1.4 2.1 30.6 3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 87.2 12.7 and average Net grazed 40 54.4 2.1 30.6 3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 87.2 12.7 and average Net grazed 40 54.4 2.1 30.6 3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 87.2 12.7 and average Net grazed 40 54.4 2.1 30.6 3 .1 84.6 0 .3 .4 3.8 .1 1.6 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	. amarad					_	Setton	Tesm 2	DIT	TIU A	16111	ty at	IALL	пагь	Stat	1611								
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Average net grazed					_		_		_	_	-				_						_			
grazed 15 70.7 .1 23.2 1.0 0 94.7 0 0 .5 .1 0 2.5 0 3.0 97.7 0 0 0 0 0 0 97.7 2.3 deretly grazed brauers parture 10 78.6 0 17.3 .9 0 96.8 0 0 1.0 0 0 1.6 0 2.6 99.4 0 0 0 0 0 0 99.4 .6 avily grazed Dahart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T .2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 erage all grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 erage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.1 1.9 ge-sand type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 erage beth sand types 30 28.3 5.2 0 .2 10.3 43.9 .5 .5 50.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 erage med average Net grazed 25 61.5 .1 35.8 1.0 .5 96.4 0 0 .3 .1 0 1.5 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 15.9 92.4 T 3.3 T T .4 92.8 7.8 Erutlesua gracilis (Rive grama), Bh-Beuteleux hirsute (Hairy grama) Ed-Buchleo dactyloides (Euffale grans), Sp-Schedemardus pants			0045	6.1.	#T90	702	U	2267	0	0	•0	96	0	0	0	60	100.50	•	0	0	0	U	100.0	9.4.
Herse's pasture 10 78.6 0 17.3 .9 0 96.8 0 0 1.0 0 0 1.6 0 2.6 99.4 0 0 0 0 0 99.4 .6 avily grazed Delhart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T .2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 erage all grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 erage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.3 0 3.9 98.1 0 .1 0 0 .1 98.1 1.9 ge-sand type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 .2 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 22.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.3 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 Med. grazed 25 61.5 .1 35.8 1.0 .8 96.4 0 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 28.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 20.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 Beuteleus graciis (Blue grama), Bh-Beuteleus hirsuts (Hairy grams) Ed-Buchleo dactyloides (Buffale grass), Sp-Schedemardus pand		16	70.7		9% 9	1 0	0	04.77	0	0	6		^	0 K	0	3.0	07.7	^	0	0	0	^	02.2	0 %
Remse's pasture 10 78.6 0 17.3 .9 0 96.8 0 0 1.60 0 0 1.60 0 2.6 99.4 0 0 0 0 0 0 99.4 .6 avity grazed Dalhart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T .2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 arage all grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 arage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.1 1.9 ge-sand type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 arage all areas 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 9rage beth sand types Net grazed 25 61.5 .1 33.8 1.0 .3 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 25 48.0 1.2 30.6 .3 2.9 78.5 .1 1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 1 T .4 3 94.0 6.0 S-Beuteleus gracilis (Blue grams), Bh-Beuteleus hirsutz (Hairy grams) Ed-Buchleo dactyloides (Buffale grans), Sp-Schedemardus pands	_	100	1041	9.7	2002	Too	U	D'46 /	U	U	90	4.L	U	240	O	250	0161	U	0	U	U	U	0101	260
Particle Par		10	70 4	_	10 3	0	0	06.0	0	0	1 0	0	0	1 4	0	2 4	00.4	^	0	^	0	0	00.4	a
Delhart Station 10 50.2 0 40.2 .6 T 91.0 0 0 T .2 0 5.9 0 6.1 97.1 0 .2 0 0 .2 97.3 2.7 erage all grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 erage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.3 0 3.9 98.1 0 .1 0 0 .1 98.1 1.9 Sand general type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.3 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 and average Net grazed 25 61.5 .1 33.8 1.0 \$ 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 22.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 11 grazed areas100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleus gracilis (Blue grams), Bh-Peuteleus hirsuta (Hairy grams) Ed-Buchleo dactyloides (Buffale grams), Sp-Schedemardus pand		10	10.0	U	T1.90	9.0	U	80 \$0	0	0	1.00	U	U	100	O	2,00	2242	U	•	U	U	U	000=	•0
grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 erage all grazed areas 20 64.4 0 28.8 .8 T 94.2 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 0 .1 98.4 1.7 erage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.3 0 3.9 98.1 0 .1 0 0 0 .1 98.1 1.9 Example Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 68.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 erage beth sand types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 erage beth sand types 40 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 leavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 8.7 large grazed 4.0 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 8.7 large grazed 4.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 8-8 Eventeleus gracilis (Rue grama), Eh-Beuteleus hirsuta (Hairy grama) Ed-Buchleo daetyleides (Buffele grass), Sp-Schedemardus part		10	50.2		40.2	a	m	01.0		0	78	: 9	0	5.0	0	4 7	07.1	0	. 2	0	0	. 9	סי יג	27
grazed areas 20 64.4 0 28.8 .8 T 93.9 0 0 .5 .1 0 3.8 0 4.4 98.3 0 .1 0 0 .1 98.4 1.7 Prage all areas 35 66.5 T 26.9 .8 T 94.2 0 0 .5 .1 0 3.3 0 3.9 98.1 0 .1 0 0 .1 98.1 1.9 Sand General type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 Oca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 Prage beth P		. 10	00 92		1002	80	1	PT 90	•	0		96	0	06 5	0	0.97	DIOT	0	• •	•	•	-	0180	64 6 1
ell areas 35 66.5 T 26.9 .8 T 94.2 O O .5 .1 O 3.3 O 3.9 98.1 O .1 O O .1 98.1 1.9 Sand ge-sand type Med. grazed 20 56.6 8.3 O .2 O 65.1 O 1.0 .5 15.3 .2 1.9 .2 19.1 84.2 O 1.0 O T 1.0 85.2 14.8 CCa-sand type Heavily grazed 10 T 2.0 O .2 20.5 28.7 .9 O 60.1 3.9 O 1.4 O 68.3 89.0 .2 O O O .2 89.2 10.6 erage beth sand types 30 28.3 5.2 O .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 O T .6 87.2 12.7 All Seil Types and average Net grazed 25 61.5 .1 33.8 1.03 96.4 O O .3 .1 O 1.3 O 1.5 97.9 O .2 O O .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 O .3 .4 3.8 .1 1.6 .1 6.2 90.8 O .4 .1 T .5 91.3 88.1 All grazed areas100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Rh-Beuteleua hirsuta (Hairy grama) Ed-Buchlee dactyloides (Buffale grans), Sp-Schedemardus pand		20	84.4	0	99.9	. Ω	ηn	93.9	0	0	-5	.1	0	3.8	0	4.4	09.3	0	.1	0	0	:1	09.4	1.7
Sand Sand S		20	OXAT	•	20 60	•0	1	1000	•	0	80	9.4	0	040	· ·	I O H	3040	U	9.1			0.4.	90 6 E	701
Send type Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 68.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth send types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types Net grazed 25 61.5 .1 35.8 1.0 .3 96.4 0 0 .3 .1 0 1.5 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 3-Beuteleus gracilis (Blue grams), Bh-Beuteleus hirsuta (Hairy grams) Ed-Buchlee dactyleides (Buffale grass), Sp-Schedemardus pand		35	66 5	m	28.0	. 0	m	04 2	0	0	:5	. 7	0	3.3	0	3.0	08.1	0	. 7	0	0	.1	99.1	1.9
Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 42 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 23.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.3 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types Net grazed 25 61.5 .1 33.8 1.05 96.4 0 0 .3 .1 0 1.5 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Bouteleus gracilis (Elue grams), Bh-Beuteleus hirsute (Hairy grams) Ed-Buchlee dactyleides (Buffele grams), Sp-Schedemardus pand	TT STANS	00	00.43	1	2008	\$0	1	9 X 0 K				- 64		0.00		000	2007		0.4	-	-	9.1.	2087	200
Med. grazed 20 56.6 8.3 0 .2 0 65.1 0 1.0 .5 15.3 .2 1.9 .2 19.1 84.2 0 1.0 0 T 1.0 85.2 14.8 cca-sand type Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types Net grazed 25 61.5 .1 35.8 1.0 .3 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Ed-Buchlee dactyleides (Buffale grass), S-Schedemardus panis	ge-sand two																							
Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage both sand types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types and average Net grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 g-Beuteleua gracilis (Rlue grama), Bh-Beuteleua hirsuta (Hairy grama) Ed-Buchleo dactyloides (Buffale grass), Sp-Schedemardus pand		20	56.6	8.3	0	.2	0	65.1	0	140	4 5	15.3	42	149	.2	19.1	84.2	Q	1.0	0	Т	1.0	85.2	14.8
Heavily grazed 10 T 2.0 0 .2 20.5 28.7 .9 0 60.1 3.9 0 1.4 0 66.3 89.0 .2 0 0 0 .2 89.2 10.6 erage beth sand types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types Not grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Ed-Buchlee dactyleides (Buffale grass), S-Schedemardus panis			2340			410			•	-40	•0		4		3	- 4					-			
rage beth send types 30 28.5 5.2 0 .2 10.3 43.9 .5 .5 30.3 9.6 .1 1.7 .1 42.7 86.6 .1 .5 0 T .6 87.2 12.7 All Seil Types and average Net grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Bd-Buchlee dactyleides (Buffale grass), Sp-Schedemardus pant		10	τp	2-0	0	.2	20.5	22.7	. 9	0	60 à 1	349	0	1.4	0	66 43	89 40	~2	0	0	Q	_2	89.2	10.6
### All Seil Types Not grazed 25 61.5 1 35.8 1.0 .3 96.4 0 0 .3 .1 1.6 0 1.5 0 0 .2 0 0 .2 0 0 .2 0 0 .2 0 0 .2 0 0 .2 0 0 .2 0 0 .2 0 0 .3 0 0 0 0 0 0 0 0 0		200	1	~ 0	,	40	2020	~~~	9.0	•	02	-0-						9.23				-		
All Seil Types Ind average Not grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Ed-Buchleo dactyleides (Buffale grass), S-Schedemardus pant		30	28.3	5.2	0	12	10-3	43.9	•5	45	30.3	9.6	.1	1.7	.1	42.7	86.46	_1	. 5	0	T	46	87.2	12.7
Not grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 g-Bouteleua gracilis (Blue grama), Bh-Bouteleua hirsuta (Hairy grama) Ed-Buchleo dactyleides (Buffale grams), Sp-Schedemardus pant	, , , , , ,	30	2000	000		40	7440	1000					4		4		0040							
Not grazed 25 61.5 .1 35.8 1.03 96.4 0 0 .3 .1 0 1.3 0 1.5 97.9 0 .2 0 0 .2 98.1 2.0 Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Bouteleua gracilis (Blue grama), Bh-Bouteleua hirsuta (Hairy grama) Bd-Buchleo dactyloides (Buffale grass), S-Schedemardus panis	and average								-			77												
Med. grazed 60 51.4 2.1 30.8 .3 .1 84.6 0 .3 .4 3.8 .1 1.6 .1 6.2 90.8 0 .4 .1 T .5 91.3 8.7 Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Bouteleua gracilis (Blue grama), Bh-Bouteleua hirsuta (Hairy grama) Bd-Buchlee dactyleides (Buffale grass), Sp-Schedemardus panis		25	61.5	. 1	35.8	1.0	3	98.4	0	0	. 3	.1	0	1.5	0	145	97.9	0	. 2	0	0	-2	98.1	2-0
Heavily grazed 40 34.4 .7 28.1 .4 6.8 70.4 .3 0 20.0 1.4 0 2.5 0 24.2 94.6 .1 .1 0 0 .1 94.8 5.1 All grazed areas 100 44.1 1.5 29.6 .3 2.9 78.5 .1 .1 8.8 2.8 T 2.0 T 13.9 92.4 T .3 .1 T .4 92.8 7.2 All areas 125 48.0 1.2 30.7 .5 2.3 82.5 .1 .1 6.9 2.2 T 1.8 T 11.2 93.6 T .3 T T .3 94.0 6.0 S-Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Bd-Buchlee dactyleides (Buffale grams), Sp-Schedemardus panis	_						-					-												
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Beuteleua gracilis (Blue grama), Bh-Beuteleua hirsuta (Hairy grama) Ed-Buchlee dactyleides (Buffale grass), Sp-Schedemardus pani									*			_									_	_		
																			-	-	-			

ulatus (Tumble grass), Tp-Triedia pilesa (Hairy Triedia), Asa-indrepegen sacchareides (Terrey's Beard grass), As-Andrepegen sceparius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Boutelous curtipendula (Side cats grams), Sn-Sorghastrum nutans (Indian grass), Sc-Sperebelus cryptandrus (Sand drepseed), Spsp-Sperebelus species, Cv-Chleris verticillata (Windmill grass), Fe-Feetuca et effera (Slender fescue), H-Herdeum pusillum (Little barley), Pc-Panicum capillare (Witch grass).



Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, mederately grazed and heavily grazed areas on different types of soil in the vicinity of Garden City, Kansss in June, 1935.

Grazing	No	^										Gr	233	Q Dec	le C												m	
end	of						P	erem	ial	gras	808	- 41	. 4.5.3	a pec.	LOB							A	nnual			Metel	Total forbs	
special	quad		Sho:	rt gr	2836	8						'all e	TREE	88						Total			rasso					
treatment	-	Bg	Rh			Total	Asm	Af A	88	ńВ	Al	Вс	Psp	Rf	Sn	Sa	Sc	Up '	Total	Pere.	CV	Fo	Н	Po	Tetal	ETARR	Per.&	880-
	-											Seil														01	DIGH!	Pon
Net grazed fer			_							_																		
8 years	4	48.9	•7	3.8	0	53.4	1.7	2.3	O	O	12.8	18.3	0	•2	0	0	0	0	35.4	88.88	0	0	•1	0	•1	89.9	11.1	0
Mederately grazed	_								^																			
Winter's pasture		16.6		76.7				0	0	0	•3	0	0	0	0	0	•		5.7	_		\mathbf{T}	•3	0		99.3		0
Byler's pasture	4	69.2	0	17.1	0	86.3	0	0	0	5ء	3.0	649	0	0	0	0	0	0	10.2	96.5	0	0	0	0	0	96.5	3.6	0
Av. mederately	3.0	40.0	_	4.0	_	00.0	^	0			3 0	<i>a</i> =					0 11	^										
grazed		42.9				89.8		0	0			3.5	0	0	0	0	2.7	0		97.8		T	•2	0	•2	97.9	2.2	0
Heavily grazed		28.7		71.3		100.0		0	0	0	0	0	0	0	0	0	0	0		100.0		0	0	0	0	100.0	0	0
Very heavily grazed	4	39.1	0	55.6	0	94.7	0	0	0	0	T	0	0	0	0	0	•3	0	•3	95.0	0	•3	•7	•3	1.3	96.3	3.6	0
Av. all grazed areas	20	36.7	0	57.9	0	94.8	0	0	0	41	•6	1.2	0	0	0	0	1.0	0	2.8	97.6	0	•1	•3	•1	•5	98.1	1.9	0
Av. all areas	24	39.9	-2	4464	0	84.5	•4	•6	0	41	3.7	5.5	0	.1	0	0	8。	0	10.9	95.4	0	•1	.3	•1	•4	95.8	4.2	0
								"Dal	har	t" Si	lt L	um S	oil (Gard	n Ci	ty S	tati	on)										-
Net grazed for	3.0	EO 6			-	05.3	^	0		^	^									05.5								
14 years	10	79.6	0	5.5	T	85.1	0	0	0	0	0	0	0	0	0	0	0	0	0	85.1	0	0	0	0	0	85.1	14.8	0
Mederately grazed																												
Not watered	10	40 5	^	41 0	0	04.0	^	0	^		0	0	^		^	^	^	^	-	OF A		_	22.0		3.2	0.5		
First lecation				41.7 34.7		84.2 98.6		0	0	0	0	8.	0	0	0	0		_	8.	-			11.0	0	11.0			
Second location		_		38 62		91.4		0	0	0	0	4	0	0	0	0	0	_	0	98.6 91.8		0	0 5.5	0	0			
Watered	10 16	300 Z	U	0002		PTOT	U	0	•		O	⊕ "2t	0	0	U	U	U	U	67	AT*O	0	U	0.0	0	0.0	97.3	2.7	U
eccasionally	4	38 • 2	0	1.3	0	39,5	0	0	0	0	0	0	0	0	0	0	0	0	0	39.5	0	. 2	39.5	0	30.7	70 2	20.8	0
Av. Med. grazed		45.7				65.5		0	0	0	0	.2	0	o	0	0		0	•2				22.5		22.6		11.8	
Average all areas		62.7				75.3		0	0	0	0	.1	_	0	O	0		0		75.4							13.3	
								#17m+	-Ami	rice	Sand	l (Sou		f the	Arlo	ongo												
Net grazed for											O entit	1 1000	A ULL U	r wie	ALA	* IV B 4	MIN WILL	91	•									
muny years	4	•3	16.9	•6	0	17.8	0	0]	2	8,9	T	0	0	3.8	16.3	6.8	8.9	0	45.9	63.7	01	8,3	0	0	13.3	77.0	23.1	0
Moderately grazed																												
Brown's pasture			•6		0	54.7	0	0	0	T	1.1	0	0	0	0		25.4			81.2		6.5		0			12.3	
Moedy's pasture			21.9	T		23.1			-	8.2	T	0					14.5		46.0			5.5		2.3	7.8			
Jenes'ssummer pas				0	_	34.1		2,3		4.2									19.9			1.4		1.1			43.3	
Jones' winter pas			29.1			30,0		•8		16.7										78.6				1.8			18.7	
Ave. Med. grazed			16.0			35.4		1.7			ه3	1.7								70.7				1.3			24.3	
Heavily grazed		-	34.7			35.8		0		3,0	0	0								54.7				0			42.7	
Av. all grazed areas						35.6				5,2		-						-		62.7				67			33.5	
Av. all areas	44	669	22.5	62	0	29.7	0	•6	04	6.4	•1	•6	•2	1.8	9.0	4.4	9°8	T	33 • 4	63.0	T	6.4	•2	04	7.0	70.0	30.0	T
Grand average											1	All So	oil T	ypes														
Not grazed	18	42.9	5_9	3.3	T	52.1	-6	-8	.4	3.0	4.3	6-1	0	1.3	5.4	2.3	3.0	0	27.1	78,9	0	4.4	T	0	4.5	83.7	16.3	0
Moderately grazed																				78.1								
Hesvily grazed						67.9		0		1.5	0									77.4				0			21.4	
Very heavily graz						94.7		o	0	0	Т	0	0	0	0	0			•3					۰3			3.6	
All grazed areas						70.2			_	3.5	٠7	.8		.3		-	-			80.7							16.1	
All areas																				80.2								
	100	OXOU	100	2200	T	0402	66	4.7	*+	406	101	200	0.1	80	0.0	TOU	200	<u> </u>	1000	0002	4_	202	₩ f	9 60	000	0002	1100	

^{*} Total vegetation includes all species, except annual forbs. T-denotes a trace or less than all percent.

Bg-Bouteloua gracilis (Blue grama), Bh-Bouteloua hirsuta (Hairy grama), Bd-Buchloe dactyloides (Buffalo grass), Sp-Schedonnardus paniculatus (Tumble grass),

Asm-Agropyron amithii (Western wheat grass), Af-Andropogen furcetus (Big Bluestem), Asa-Andropogen saccharoides (Torrey's beard grass), As-Andropogen acc
parius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Bouteloua curtipendula (Side eats grama), Psp-Panicum species, Rf-Redfieldia flexuesa

(Blow-out grass), Sn-Sorghastrum nutans (Indian grass), Sc-Sporobolus asper (Rough rush grass), Sc-Sporobolus cryptandrus (Sand dropseed), Up-unknown perennial,

Cv-Chloris verticillata (Windmill grass), Fo-Festuca ectoflora (Slender fescue), H-Hordeum pusillum (Little barley), Pc-Panicum capillare (Witch grass).



Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, mederately grazed and heavily grazed areas in the vicinity of Tribune, Kansas, in June, 1935.

Grazing	No.					rass s		8.				Total	
end	ef				mial	grass				Ann	Total	forbs	tal
watering	quad-	Sh	ort gran			Tall			Total		_ 211	Per &	sed-
treatments	rats	Bg	Bd	Tetal	Al	Şa	Sc	Total	Pere	_H_	grass	Bien	ges
			#C	olby" Si	lt Lo	am Soi	3						
Net grazed						L DVA	_						
Lightly watered lawn	4	5.0	94.8	99 -8	0	0	0	0	99.8	T	99.8	•2	0
Dry-land area**		86.1	12.5	98.6	o	o	0	0	98.6	0	98.6	1.4	0
Average not	_												
grazed	12	45,6	53 ₄ 7	99.2	0	0	0	0	99.2	T	99.2	•8	0
Mederately grazed													
Cattle-horse pasture													
High land	8	52.2	46.0	98.2	0	0	0	0	98.2	0	98.2	1.9	0
Low land	8	7.7	83.8	91.5	0	1.7	0	1.7	93.2	0	93.2	6.8	0
Av. cattle pasture	16	30.0	64.9	94.9	0	•8	0	•8	95.7	0	95 .7	4.4	0
Cattle-pasture													
High lend	8	62.7	37.3	100.0	T	0	0	${f T}$	100.0	0	100.0	0	0
Let land	8	66.7	33 •3	100.0	0	0	0	0	100.0	0	100.0	0	0
Av. cattle pasture	16	64.7	35.3	100.0	T	0	0	T	100.0	0	100.0	0	0
Sheep pasture	8	58 • 9	39.2	98.1	•3	0	•6	•9	99.0	0	99.0	•9	0
Average mederately													
grazed	40	51.2	46.5	97.7	•1	₀ 3	.2	46	98.2	0	98.2	1.8	0
Heavily grazed													
Small herse pesture													
High land	8	43.6	564	100.0	0	0	0	0	100.0	0	100.0	${f T}$	0
Low land (flooded													
June 6, 1932)	8	42.3	55.3	97.6	0	0	•3	٠3	97.9	0	97.9	2,0	0
Av. horse pasture	16	43.0	55 49	98.88	0	0	•2	.2	88 *0	0	9940	1.0	0
Large sheep pasture	8	41.4	57.4	98.8	0	0	ما	.1	98.9	0	98.9	1.0	0
Average heavily	Ŭ		0,41	00.0			-	•-					
grazed	24	42.2	56.7	98.8	0	0	.2	.2	99.0	0	99.0	1.0	0
- Brenod	~~												
Grand average													
All grazed areas	64	47 •6	50.5	98.1	•1	•2	•2	.4	98.5	0	98.5	1.5	0
433 cmaa.	n.c	AD 7	53. 3	00 7	1			4	00.4	m	00 4	2.4	0
All ereas	76	47.3	51.1	98.3	•1	•2	•2	•4	98.6	T	98,6	1.4	

^{*} Total vegetation includes all grasses and all peremial and biemial forbs. The important amual forbs were charted, others were estimated.

^{**} Not grazed for eleven years, except in the winter of 1934-35.

T-denotes a trace or less than .1 percent.

Bg-Boutelous gracilis (Blue grams), Bd-Buchlee dactyleides (Buffale grass), Al-Aristida lengiseta (Wire grass), Sa-Sporebelus asper (Rough rush grass), Sc-Sporebelus cryptandrus (Sand dropseed), H-Hordeum pusillum (Little barley).



Table _____ Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, moderately grazed and heavily grazed areas in the vicinity of Colby and Rexford, Kansas, in June, 1935

	No.						Gras	s spe	cies									Total	To-
Grazing and	of				Perem	ial g							A	nnue	u		Total	forbs	tal
watsring	quad-	S	short g				Tal	l gra			Total		e	TBBS	808		all	Per.&	sed-
treatments	rats	Bg	Bd	Sp	Total	Aem	Sa	Sc	Spap	Total	Pere.	Fo	H	Pc	Ua	Total	grass	Bien.	ges
				C	lby Si	1+ Te	om /1	fo dii sam	heem	w +av+									
In Vicinity of Colby Station				- 00	10 31	10 100	am (P	19 a. I. am	-110 G A	y COAC	urej	-							
Not grazed																			
Dry land area,																			
ungrazed for 3 years	8	30.8	41.4	0	72.2	0	Т	1.0	0	1.0	73.2	0	1.0	•3	845	9.8	83.0	3.7	13.2
Lawn watsred in fall 19		22.7	66.8	1.9	91.4	0	3.1	2.3	0		96.8	0	•5	T	0	•5	97.3	4 5	2.1
Average net grazed	14	26.8	54.1	1.0	81.8	0	1.6	1.7	0	-	85.0	0	.8	.2	4.3	5.2	90.2	2.1	7.7
Madamatal T. compand																			_
Moderately grazed First location	8	51.6	34.6	0	86.2	0	0	3.9	0	3.9	90.1	0	-4	т	6.1	6.5	00.0	0.0	1 0
Second lecation	8	52.3	38.8	0		0	0	•3	T	43	91.4	0	-	T	6.3	6.3	96.6 97.7	2.0	1.2
		_		0	_	0	0	2.1	T		90.8	0	T	_				2.3	T
Average mod. grazed	16	52.0	36.7	U	88.7	U	U	241	T	2.1	80 ° Q	U	•2	T	6.2	0.4	97.2	2.2	.6
Heavily grazed																			
East of Colby Station	8	3.2	61.0	0	64.2	0	0	1943	0	19.3	83.5	0	1.8	•8	10.1	12.8	96.3	₆ 5	3.2
Average all grazed areas	24	27.6	48.9	0	76.5	0	0	10.7	T	10.7	87.2	0	1.0	_é 5	8.2	9.6	96.8	1.4	1.9
				_										-					
Average all areas	38	27.3	50.6	↓ 3	78.2	0	_{\$} 5	7.7	T	8.2	86.4	0	•8	•4	6.9	8.1	94.6	1.6	3 •8
m Fester Farms (20 miles N.E.	of C	olby.	Kansas	1)			_												
Moderately grazed	5		67.8	T	97.0	0	0	1.3	0	1.3	98.3	.2	1.1	0	.1	1.4	99.7	•3	0
Heavily grazed	5	19.6	76.7	T	96.3	1.0	0	T	0	1.0	97.3	•5	1.6	T	0	2.1	99.4	•4	42
Very heavily grazed	5	15.9	82.2	T	98.1	5	0	41	0	ė6	98.7	.1	1.3	0	0	1.4	100.0	T	0
Ave. all grazed areas																			
near Rexford	15	21.6	75.6	T	97.1	₽ 5	0	. 5	0	1.0	98.1	•3	1.3	T	T	1.6	99.7	•2	•1
rand average, all locations												_							
Not grazed	14	26.8	54.1	110	81.8	0	1.6	1.7	0	3.2	85.0	0	-8	.2	4.3	5.2	90.2	2.1	7.7
Moderately grazed	21	40.6	52.3	T	92.9	o	0	1.7	T	1.7	94.6	.1	•7	T	3.2	3.9	98.5	1.3	•3
Heavily grazed	13	11.4	68.9	T	80.3	4 5	0	9.7	Ō	10.2	90.4	•3	1.7	. 5	5.1	7.5	97.9	<u>.</u> 5	1.7
Very heavily grazed	5	15.9	82.2	Ť	98.1	•5	0	1	0	46	98.7	-1	1.3	0	0		100.0	Ψ	0
All grazed areas	39	24.0	64.9	T	88.9	•3	0	4.6	T	4.9	93.7	.2	1.2	•2	3.3	4.8	98.5	-7	.8
All creas	53	-	_	_			•3	4.1	T	4.6	92.3	. 1	1.1	-2	3.5	4.9	97.1	. 9	2.0
VII GIAGR	55	24.5	63.1	.2	87.7	•3	•0	TOT.	1	700	25 00	• 1	TOT	9.6	0.0	700	DIST	● ₽	200

^{*-}Total vegetation includes all species of vegetation, except annual forbs.

T-denotes a trace or less than .l percent.

Bg-Bouteloua gracilis (Blue grama), Bd-Buchlee dactyloides (Buffalo grass), Sp-Schedonnardus paniculatus (Tumblagrass)
Asm-Agrepyron amithii (Western what grass), Sa-Sporobolus asper (Rough rush grass), Sc-Sporobolus cryptandrus (Sand dropseed),
Spap-Sporobolus species, Fo-Festuca octoflora (Slender fascue), H-Hordeum pusillum (Little barley), Pc-Panicum capillare (Witch grass), Ua-Unknown annual.



Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, mederately grazed and heavily grazed areas on different types of soil in the vicinity of Weedward, Oklahoma, in May, 1935.

		N••									Grass	өрө	cies									Total
		of						renn	ial	grass	00							Amual			Total	ferbe
	Grazing	quad		Shert	grae	9500					grass				Total			grasse				Per.&
	treatmente	rats	Bg	Bd	Sp	Tp	Total	Af	As	Al	Вс	Рв	Sc	Total	Pero.	C∇	Fo	H	Sne	Total	grase	Bien.
	Silty Clay Leam Seil																					
Hea	avily grazed	13	12.9	73.6	•2	0	86.7	0	•1	1.3	10.1	0	T	11.5	98.2	•3	.2	0	0	•5	98.7	1.3
	ry heavily graze	d 10	3.1	90.5	•7	0	94.3	·l	0	•4	2.5	0	•3	3.3	97.6	.1	.2	0	•1	.4	98.0	2.0
	Average	23	8.0	82.1	•5	0	90.5	.1	•1	.9	6.3	0	62	7.4	97.9	•2	•2	0	•1	•5	98.4	1.7
	Sandy Leam Seil																					
Net	grazed	5	35.0	48.3	0	0	83.3	0	0	0	0	T	7.6		90.9	0	0	8.1	0	8.1	99.0	1.0
Ver	ry mederately gr	ezed 5	46.7	29.7	0	T	76.4	•3	0	64	T	0	4.6	5.3	81.7	0	.1	14.7	0	14.8	96.5	3.3
	Avorage	10	40.9	39.0	0	Т,	79.9	۰2	0	•2	T	T	6.1	6.5	86.3	0	•1	11.4	0	11.5	97.8	2.2
								В	•th	Турее	of Se	11										
Gra	and Average																					
	All grazed area	s 28	20.9	64.6	•3	T	85.8	å 1	T	67	4.2	0	1.6	6.7	92.5	•1	•2	4-9	T	5,2	97.7	2.2
	All areas	33	24.4	60.5	•2	T	85.2	.1	T	4 5	3.2	T	3+1	649	92.1	7	•1	5.7	T	6.0	98.1	1.9

^{*} Total vegetation includes all species, except amnual forbe.

T-indicates a trace or less than .1 percent.

Bg-Bouteleua gracilie (Blue grama), Bd-Buchlee dactyloidee (Buffale grass), Sp-Schedenmardus paniculatus (Tumble grase), Tp-Triedia pilesa (Hairy Triodia), Af-Andrepegen furcatus (Big Bluetem), As-Andrepegen ecoparius (Little Bluetem), Bc-Bouteleua curtipendula (Side eats grama), Ps-Panicum ecribnerianum, Sc-Sperebelus cryptandrus (Sand dropseed), Cv-Chloris verticillata (Windmill grase), Fe-Festuca ecteflera (Slemder Fescue), H-Hordeum pusillum (Little barley), Sne-Sperebelus neglectus (Small rush grass), Al-Aristida lengieeta (Wire grase).



Percentage of total vegetation* centributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, moderately grazed and heavily grazed areas on different types of soil in the vicinity of North Platte, Nebraska, in June, 1935.

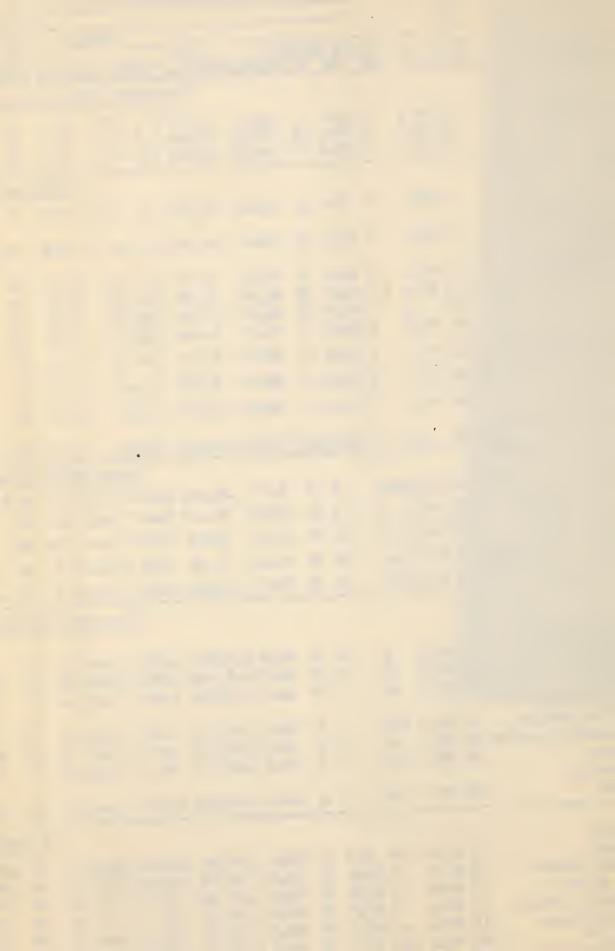
	No.												Gras	s sp	ecies														
	of									Pere	mial	Frass												Annı	107		Mada 3	Total	
Grazing	quad-			rt gre									Tall	gras	808							Tetal			3868		Total		
treatmen.te	rats	Eg	Bh	Bd	Sp	Total	Apa	Asm	AT	AB	Al	Bo	Cle	Hj	Ps	PY	Se	Se	Sc	Sce	Total	Pere.	Fo			Potal	grans	Per-&	800~
								"Celb	v" V	erv Fi	ne Sei	ndv I.	am Sei	1 /T	n vic											4.000	82-00	DIGHA	KOD
Net grazed for 8 years	5	67.9	0	20.4	0	88.3		6.0	0	0												_							
Very moderately grazed		0100	Ü	2014	U	0000	U	040	U	U	•2	0	0	0	T	0	0]	1,3	•1	0	7.6	95.9	2.7	0	0	2.7	98.5	-8	.4
Level upland	5	60.0	0	34.1	qr.	94.1	0	.2	0	0	•3	0	0	1	0	O	_												
Sleping hill tep	5	39.0		26.2	Ô	65.2	0	.9	0	23.2	2.2	0	0	0	0	0	0	ф2 П	•3	0	1.1	95.2	-8	0	0	-8	96.0	•3	3.6
Ave. V. Med. grazed	10	49.5		30.2	J.	79.7	0	•6	0	11.6	1.3	0	0	.1	0	0	0	1 al	•1		30.0	95.2	1.9	0	_	1.9	97.1	1.2	1.6
Mederately grazed			_	00 410	_			•			140	O	· ·	•±	0	U	U	44	•2	1.8	15.6	95.2	1.4	0	0	1.4	96.6	-8	2.0
Nearly level upland	5	52.7	0	41.6	0	94.3	0	.9	0	0	-9	0	0	0	0	0	0	т	.3	3.0	6.1	00.4		_	_		00.4		
Sleping hill tep	5	27.6	.1	45.3	.1	73.1	0	0	0	3.3	2.0	1.7	0	0	0	0	0	T	Y	4.3	5.1	99.4 86.0	•2 •3	0	0	42	0.00	.2	•1
Ave. Mod. grazed	10	40.2	.1		.1	83.7	0	.5	0	1.7	1.5	- 9	0	0	0	0	0	Ψ	1.1	3.7	-	93.0	•3	0	0	•3 •3	86.3 93.0	-8	12.7
Heavily grazed for			Ť		•					_ •						•		_	TOT	041	892	80.00	•0	U	U	•3	A9.00	•5	6.4
25 years	5	39.1	0	59 4	.1	98.6	0	.1	0	0	Т	0	0	T	0	0	0	0	T	0	٦٦	98.7	.6	0	.1	•7	99.4	•5	Т
Ave. all grazed areas	25	42.9	т	44.4	.1	87.3	0	44	0	4,4	•9	•3	0	Т	0	0	0	T											
Aros all Brazon arous	200	4000	^	2104	**	0140	O	•=		Z9W	**	90	O	7	U	U	U	Т	• *	1.8	8.3	95,6	•8	0	T	-8	26.3	8.	340
Ave all areas	30	48.9	T	38.4	T	87.6	0	1.8	0	3,3	8.	•2	0	T	0	0	0	•4	44	1.4	8.1	95.7	1.3	0	T	1.3	96.8	•7	2.4
								"Val	enti	ne" Le	emy Si	md to	Dune	Sand	(Ten	mile	s no	orth	of Ne	rth P	latte)								
Net grazed	5	24.1	0	0	0	24.1	Т		3,0	. 5	ما		16.2	0	Т	0	0		31.9		5540	79.1	.1	0	0	.1	70.2	4.2	16.5
Very Med. grazed	5	28.2	2.6	11.3	0	42.1	0	-6	T	26.1	T	0	5.4	0	.6	46	Т		15.6	.6	49.5	91.6	1.5	.6	0	2.1	93.7	2.0	4.1
Mederately grazed	5	58.6	.9	0	0	59.5	0	1.2		8.9	0	0	7.7	0	-4	8	2		14.8		36.9	96.4	-1	.1	0	2	96.6	1.5	1.7
Heavily grazed	5	58.6	2.2	0	0	60.8	0	0		11.6	T	0	3.5	0	-	1.0	0		15.8	.1	-	93.3	1.8	0	_	1.8	95.1	2.6	2.1
	15	48.5	1.9	3.8	0	54.1	0	26	47	15.5	Т	0	5.5	0			-												
Ave. all grazed areas	1.0	4000	Tea	940	U	OHAL	U	90	47	10.0	T	U	∂ •0	U	• 5	•8	•1	U	15.4	6 0	28.0	93,8	1.1	.2	U	丁辛亞	95.1	2.0	8.8
Ave. all areas	20	42.4	1.4	208	0	46.6	0	•5 .	1.3	11.8	T	0	8.2	0	•4	•6	•1	0	19.5	1.2	43 ₆ 5	90.1	•9	.2	0	1.1	91.2	2.6	6.1
												В	th Ty	nes i	of Se	11													
Grand average													2,1																
Net grazed	10	4630	0	10.2	0	56.2	T	3.0	L ₅ 5	\$ 3	÷2	0	8.1	0	T	0	0	47	16.0	1.7	31.5	87.5	1.4	0	0	114	88.9	2.5	8.5
Very Med. grazed	15	38.9		20.8	T	60.9	T	640	T	18.9	÷7	0	2.7	.1	•3	.3	T	.1		1.2	32.6	93.4	1.4	0	0	1.8	95.2	1.4	3.4
Mederately grazed	15	49.4	\$ 5	21.8	.1	71.6	T	.9		5.3	•8	_e 5	3.9	0	.2	•4	-1	T	8.0	2,3	23.1	94.7	.2	0	0	•3	94.8	1.0	4.1
Heavily grazed	10	48.9	1.1	29.7	.1	79.7	T	.1	.1	5.8	T	0	1.8	T	•2	•5	0	0	7.9	.1	16.3	96.0	1.2	0	.1	1.3	97.3	1.6	2.1
All quadrats	50	45.8	.7	20.6	T	67.1	T	1.1	.6	7.6	3.9	•1	4.1	T	•2	•3	·l	.2	9.9	1.3	25.8	92.9	1.2	•1	T	1.2	94.0	1.6	4.2

^{*} Tetal vegetation includes all species, except annual forbs. Tedenotes e trace or less than el percent.

Bg-Boutelous gracilis (Blue grams), Bh-Boutelous hirsuta (Hairy grams), Bd-Buchlee dectyloides (Buffale grass), Sp-Schedomardus paniculatus (Tumble grass),

Apa-Agrepyren pauciflorum (Slender wheat grass), Asm-Agrepyren smithii (Western wheat grass), Af-Andropogon furcatus (Big Bluestem), As-Andropogon scoparius (Little Bluestem), Al-Aristida longiseta (Wire grass), Bc-Boutelous curtipendula (Side oats grams), Clo-Calamovilfa longifolia (Long-leaved reed grass), Hj-Hordoum jubatum (Squirreltail), Ps-Panicum scribnerianum, Pv-Panicum virgatum (Switch grass), So-Sphenophelis ebtusata (Prairie wedge grass), Sa-Sporobolus asper (Rough rush grass),

Sc-Sporobelus cryptandrus (Sand dropseed), Sco-Stipa comata (Needle grass), Fo-Festuca octoflora (Slender fescue), Pc-Panicum capillare (Witch grass), Sno-Sporobelus neglectus (Small rush grass).



Percentage of total vegetation* contributed by different species and classes of herbacious vegetation as indicated by the relative ground cover of ungrazed, moderately grazed and heavily grazed areas on different types of soil in the vicinity of Akron, Colorado, as charted with pantographs in June, 1935.

	No.										Grad	s sp	raci	0.9														
	of						Per	ennia	l gr	8556	9	33 37	3001								An	nual					Total	
Grazing	quad-	Short	gras	308								15869	3				Total									btal	forba	
treatments	rats Bg			Total	Apa	Asm	Af Al	Clo	Hj.					Sc	800	Total	Pere.	Bt	Fo	H M		6 Sar		Us To	tol c	all	Per &	sed-
						Clay	Loan	, 50 ı	mile	s Sai	No of	Akr	on.			Chanc					-	0 001		03 10	rat 8	Tara	Blen	Ros
Heavily grazed																	_											
Shoop pasture	10 45.2	0 50			0	0	0 0			0	0	0	0	0	0	0			.2		0	_	0	0	2	96.3	3.7	0
Cattle pasture	10 50.5	0 34			0	•4	0 0			0	0	0	.1	T	0		85.0		•8		0			0			14.1	0
Average	20 47.9	0 42	5 T	90.3		•2	0 0	1	0		0	0	.1	T	0	•0	90.6	0	•6	0	0	0 0	0	0	ů.	91.1	8.8	0
Not grazed								S	ilt :	Loam	, Alco	ron S	Stat.	ion														
R.R. right of way	10 87.5	0 7	8 T	95 •3	0	0	0 0	0	0	0	<u>a</u> 1	0	0	0	0	-1	95.4	.1	. 2	.1	0	3 O	0	m		0.5.3	77.0	,
Moderately grazed																-		91	• ~	• 7	0 .	0 0	U	T	•7	96.1	3.0	• 1
Deferred pasture	10 15.0	0 44	9 0	59.9	0	0	0 .5	0	0	0	0	0 1	L.9	1.8	0	4.2	64.1	0	•5	.1 .	2 .	4 0	0	0 1	.2	65.3	2.8	32.0
Heavily grazed																	-				,			0 1	0 10	0320	200	0620
Horse pasture	10 48.5	0 49		_	0	0	r o	_	0	0	0	0	0	0	0	T	97.6	0	.4	0	0	0 0	0	0	.4	98.0	1.3	.6
Sheep pasture	10 41.9	T 44			0	0	0 .]			0	0	0	0	•4	0	ه5	87.0					0 .1	.1	0 1		88.2		11.0
Sheep pasture	10 .1	0 94		-	0	0	01 3			0	0	0	•4	1.9	0	3.6	98.4		•5		.4		0	0	θ	80.3	•5	•4
Average	30 30.2	T 62		93.0	0	0	0 •6	0	0	0	0	0	1.	٠7	0	1.3	94.3	0	06	0 .	1	т т	T	0	.8	95.2	.8	4.0
Very heevily grazed	10 58.2	0 40	7 0	98.9	0	0	0 0	0	0	0	0	0	0	•6	0	•6	99.5	0	T	0 .	1	0 0	0	0	.1	0° 88	•1	.1
Ave. all grazed areas	50 34.5	Т 49	5 T	83.9	0	0	0 •3	0	0	0	0	0	. 7	1.0	0	2.0	86.0	0	.4	т.	1.	1 Т	Т	0	•7	86.7	1.2	
Ave. all areas	60 47.7	m 30	ת נ	86.8	0	0	0 -3	0	0	0	т	0	•5	0	0	1 6			_				_	_				
Cultivated field sban-		1 056) I	00.00	U	U	0 40	. 0	O	0	1	U	90	8	0	1.6	88.3	Т	•3	.1 .	, L 0	.2 T	T	T	•7	89.1	1.9	9.1
doned in 1908	10 •2	0 62	2 .7	63.1	A 2	0	03,5	0	Т	42	. 2.	0 2	2.46	14.8	0	21.5	84.6	0.1	.6.2	.n a.	7.	2 0	0	0 13	5	98.1	1.8	<i>e</i> 3
																1111111	01.00				7 0	2 0		0 10	• 0	100 I	Teo	• 6
Not grazed					_			amy S																				
Hay meadow	10 16.1		т о	30.7	•3	2.2 2		7.3				0	•4	2.8	25.8	45.2	75.9	0	0	0	0	0 0	0	0	0	75.9	16.1	8.1
← Moderately grazed	10 68 0	0	0 0	68,0	0	0 1	0 0	14.5	0	0	•3	0	T	2.7	5.6	24.1	92.1	0	•2	0	0	0 0	0	0	.2	92.3	5.5	2.1
-Heavily grazed	10 58.7	1.9	0 0	60,6	0	1.1	Γ 0	4.4	0	0	0	0 1	.3	10.7	3.4	20.9	81.5	0	T	0 1.	1	0 0	0	0 1	.1	82.6	17.2	.2
←Ave. sll grazed area	88 20 63.4	1.0	0 0	64.3	0	•6	.5 T	9.5	0	0	.2	0	•7	6.7	4.5	22.5	86.8	0	.1	0 .	6	0 0	0	0	.7	87.5	11.4	1.2
←Ave. all sress	30 47.6	5.5	т о	53.1	.1	1.1 1	.3 T	8.7	0	т	1.3	0	ه6	5.4	11.6	30.1	83.2	0	.1	0 .	4	0 0	0	0			12.9	
Heavily grazed							7	une S	and,	18 1	niles	N.W	6 0	r Akn	on													
Sage-sand type																												
Ankle's pasture	5 42.3			42.3							C						65.4		T			0 0		0		65.4		8.
Stockwall's pest				_		-	-	-						-	_													
Average	10 41.5	•1	0 0	41.6	2.5	3.9 1	.48 0	5 •5	0	0	0	0	T	6.9	4.2	24.8	66.3	0	Т	0	0	02 0	0	0	T	66.3	31.8	2.0
Yucca-sand type	E 44 D	4.5	0 0	40.0	3 0	0	0 0	0.0	_	0	0.0	2 7 7	-		2 2	30.5	80 F	0	0	0	0	0 0	0	0	0	60 P	20 n	1 1
Ankla's pasture Stockwell's pastur	5 44.7			49.2		0		8.9									68.7		0	0	_	0 0	_	0			30.2 68.2	
Average	15 32.7			21.0 35.1			•7 O		0	0							30.4		0		_	0 0	_	0			49.2	
Ave. heavily	10 0257	W 9 I	0 0	OOST	TOT	Т	•= 0	# # O	U	V	0 .	, 6 D	*0	792	200	7.400	786U	U	0		~	0	V			2000	1000	4. 6 60
grazed	25 37.1	1.3	0 0	38.4	2.0	2.0 1	1 0	5.0	0	0	0 2	0.5	4 3	4.0	3.4	19.7	58.0	0	T	0	0	0 0	0	0	T	58.0	40.5	1.6
Grand average									1	ll Sc	oil I	ypes	3															
Not grazed	20 51.8	7.3 3.	9 T	63.0	.2	1.1 1	-4 0	3.7	0	.1 :	1.8	0	.2	1.4	12-9	22.7	85.7	•1	.1	.1	0 .	2 0	0	T	. 4	0.88	10.0	4.1
Moderately grazed	20 41.5		5 0	64.0	0	0	.5 .3	7.3	0	0	.2	0 1	0	5.3	2.8	14.2	78.1	0	.4	al o	1.	2 0	0	0	•7	78.8	4.2	17.1
Heavily grazed	85 43.5									0	0	•5	•5	3.9	1.7	10.6	81.1	0	•3	0 .	.3	TT	T	0	.6	81.7	16.9	1.5
Very heavily grazed	10 58.2	0 40.	7 0	98.9	0	0	0 0	0	0	0	0	0	0	•6	0	•6	99.5	0	T			0 0		0		89,6		.1
All grazed sroas	115 45.0																82.9					1 T		T	•6	83.4	10.8	5.7
All areas**	135 46.5	2.0 22.	1 T	70.6	.3	•6	•5 •1	3.5	0	T	•4	•2	•5	2.6	4.2	12.9	83.5	T	.2	T .	2 .	l T	T	T	•5	84.0	10.6	5.4
* Potsl Vegetation								-												-								

^{*} Total vegetation includes all spacies, encept annual for? Teledicates a locas or less than all percent.

								-		100									
Grazing er	No.				2	- 1 - 3			83 Sp	ec1 68			Apr	ual		-	Total	To-	Total
clipping	of				Peren		The same of the sa				Total					Total	forbe	tel	Tege-
	quad.		ort gra		-			88988		-	Pere.	C▼	Fe	38888	m 1 2	all	Peres	sed-	ta-
treatments	rate	Bg	Bd	Total	Asm	As	Al	Ве	Sc	Total	1010	-01	T	H	Total	grass	Bien.	gee	tion*
					S	11 tv	Clav	Loam	Sati										
Dry Land Lawns:	_				_					0	40 00	0	0	0					
Clipped 1/2 in.	2	3,85	44.23	48.08	0	0	0	0	0	0	48.08		0	0	. 0	48.08	•16	0	48.24
Clipped 1 1/4 in.	8	9.10	20.16	29,26	.10	.02	0	0	.19	.31	29.57	0	0	0	0	29.57	•10	.29	29.96
Clipped 2 in.	2	12.61	15,00	27.61	.21	0	0	0	•44	.65	28 • 26	0	•03	0	₽03	28.29	•02	0	28.31
Cut twice yrly. 1 1/4 in.	2	14.73	21.23	35.96	•45	0	0	0	•76	1.21	37.17	0	0	0	0	37.17	0	Ō	37.17
Net cut	2	10.37	10.60	20.97	1.00	0	0	0	.19	1.19	22.16	0	0	0	0	22.16	4.96	0	27.12
Average dry land											55.05								21 912
lawns	16	10.13	22.24	32.38	•35	T	0	0	32	•67	33.05	0	.01	0	•01	33.05	1.05	.06	34.16
Lightly Watered Lawns:																			- 10,20
Clipped 1/2 in.	2	5.45	86.84	92.29	.19	0	0	0	0	.19	92.48	0	0	•02	.02	92.50	۰02	6 3	93.15
Clipped 1 1/4 in.	2	12,63	66.81	79.44	0	0	0	0	0	0	79.44	0	0	0	0	79.44	.03	0	79.47
Clipped 2 in.	2	13.85	46.34	60.19	.29	0	1.76	0	0	2,05	62.24	€27	0	•06	•33	62.57	.19	0	62.76
Cut twice yrly. 1 1/4 in.	2	25.73	32.32	58.05	.89		647	0	.84	2.20	60.25	0	0	1.16	1.16	61.41	.37	0	61.78
Not cut		17.35	21.61		-52		1.26	0		1.78	40.74	0		1.24		41.98	2,81		
Average lightly																-2400	POOT	•10	44.95
watered lawns	10	15-00	50.78	65.79	•38	0	470	0	.17	1.24	67.03	•05	0	•50	•55	67.58	60	20	20.40
Heavily Watered Lawns:		20,00	00 810	00010	900		., .		91,			-		300	- 800	07,00	•68	• 10	68,42
Clipped 1/2 in.	2	1.42	92.45	93.87	•06	0	0	0	0	.06	93.93	•06	0	•10	•16	04.00	4.0		
Clipped 1 1/4 in.	9	11.00	66.29	77.29	0	0	0	0	0	0	77.29	.15		.68	-	94.09	.42	0	94.51
	6						_						0		•83	78.12	• 28	0	78.40
Clipped 2 in.	2	23.39	43,08	66.47	•03	0	•06	•66	0	•75	67.22	0	0	.27	_27	67.49	1.55	0	69.04
Cut twice yrly. 1 1/4 in.	2	8.31	22.13	30.44	.05	0	0	0	-06	•11	30.55	.24		2.87	3.17	33.72	•20	0	33.92
Not cut	_2	15.98	22.76	38.74	0	0	1.73	0	.13	1,86	40.60	0	•10	•37	•47	41.07	1.40	0	42.47
Average heavily	10	10.00	49.34	A1 3A	•03	0	-36	.13	.04	•56	61.92	•09	•03	0.6	00	00 00	ne	0	07 00
watered lawns	10	12402	48404	01100	\$00		430	610	204	900	OTORS	*08	400	•86	• 98	62.90	•77		63.67
Average All Lawns:					0.0					0.0	DO 3 4	0.0							
Clipped 1/2 in.	6	3.57	74.51	78.08	•08	0	0	0	0	•08	78.16	•02	0	.04	•06	78.22	•20	.21	78.63
Clipped 1 1/4 in.		10.91	51.09	62.00	•03	.01	0	0	•06	.10	62.10	•05	0	.23	. 28	62.38	.14		62.61
Clipped 2 in.		16.62	34.81	51.42	•18	0	061	•22	.15	1.15	52.57	•09	•01	•11	421	52.78	•59	0	53.37
Cut twice yrly. 1 1/4 in.		16.26	25,23	41.48	4 6	0	.16	0	● 55	1.17	42,66	•08	.02	1.34	1.44	44.10	.19	0	44.29
Net cut	6	14.57	18.32	32.89	•51	0	1,00	0	-11	1.61	34.50	0	•03	•54	•57	35.07	3.06	•05	38.18
Ave. all watering and																			
clipping treatments	36	12.38	40.79	53.18	•25	T	•35	a04	.18	▶82	54.00	•05	•01	•45	•51	54.51	.83	•07	55.42
Moderately grazed:	6	8,63	12.47	21.10	.10	0	0	0	0	•10	21.20	0	0	0	0	21.20	•05	T	21.25
Heavily grazed:																			
First location	12	4.32	8.18	12,50	0	0	0	0	.10	•10	12.60	0	0	0	0	12.60	0	0	12.60
Second location	9	5.23	12.00		T	0	•02	0	a08		17.33	T	0	1.21	1.21		.04		18.58
Average heavily.																			
grazed	21	4.78	10.09	14.87	T	0	.01	0	.09	•10	14.97	${f T}$	0	•61	.61	15.57	.02	0	15.59
Grand Average:																			
All grazed																			
Breas	29	6-71	11.28	17.00	•05	0	.01	0	•05	•10	18.09	Т	0	•30	.30	18.39	•03	Т	18,42
All treatments	20	0417	TT 910	1.000	-00	•	942		, , ,	4-20	70408	1	J	*00	900	200	\$ 30	-	
except watering	43	7.25	14.93	22.70	.15	Т	T	0	.14	•29	07 07	Т	T	.20	.21	23,27	•37	.02	23.67
All treatments in-	TU	7 800	TIPOU	PP 0 10	910	1	1		9-4-8	440	23.07	T	T	020	الممل	2000	.07	902	20.00
	6ª	10.33	20 00	30.10	3.77	m	27	03	7.9	52	F0 07	077	03	70	42	10 04	E3	04	40.62
cluding wetsring	00	TOOTT	28,98	2A*TO	.17	T	مند	.00	014	100	39.63	.03	•01	•38	.43	40.06	.51	00%	10.02

^{*} Total vegetation includes all species of vegetation, except annual forbs. T-trace or less than all percent.

Bg-Boutelous gracilis (Blue grams), Bd-Buchloe dactyloides (Buffelo grass), Ast-Agropyron smithii (Western wheat grass), Ast-Andropogon scoparius (Little Bluestem), Al-Aristida longissta (Wire grass), Bc-Boutelous curtipendula (Side oate grams), Sc-Sporobolus cryptandrus (Sand dropseed), Cv-Chloris verticillata (Windmill grass), Fo-Festuca octoflora (Siender fescue), H-Hordeum pusillum (Little barley).

Additional	footnote	for	Table	

Bg-Bouteloua gracilis (Blue grama), Bh-Bouteloua hirsuta (Hairy grama), Bd-Buchloe dactyloides (Buffalo grass), Sp-Schedonnardus paniculatus (Tumble grass), Apa-Agropyron pauciflorum (Slender wheat grass), Af-Andropogon furcatus (Big Bluestem), Al-Aristida longiseta (Wire grass), Clo-Calamovilfa longifolia (Long-leaved reed grass), Hj-Hordeum jubatum (Squirrel-tail), Psp-Panicum species, Pv-Panicum virgatum (Switch grass), Rf-Redfieldia flexuosa (Blow-out grass), Sa-Sporobolus asper (Rough rush grass), Sc-Sporobolus cryptandrus (Sand dropseed), Sco-Stipa comata (Needle grass), Bt-Brcmus tectorum (Downy Brome), Fo-Festuca octoflora (Slender Fescue), H-hordeum pusillum (Little barley), Ms-Munroa squarrosa (False buffalo grass), Pc-Panicum capillare (Witch grass), Ssp-Setaria species, Sv-Setaria viridis (Green foxtail), and Ua-unknown annual grass.

